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NAS CECIL FIELD, FL
5090.3a

SUPPLEMENTAL SOIL ASSESSMENT LETTER REPORT FOR TANK G290A NAS CECIL FIELD FL
11/9/2006
TETRA TECH NUS INC

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November 9, 2006

Project Number 112GN4248

Mr. David Grabka
Florida Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Reference: CLEAN III Contract Number N62467-94-D-0888
Contract Task Order 0248

Subject: Supplemental Soil Assessment Letter Report for Tank G290-A
Naval Air Station Cecil Field, Jacksonville, Florida

Dear Mr. Grabka:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this Supplemental Soil Assessment Letter Report for Tank G290-A at Naval Air Station (NAS) Cecil Field. This report has been prepared for the United States Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE) under Contract Task Order (CTO) 0248 of the Comprehensive Long-term Environmental Action Navy (CLEAN) III Contract Number N62467-94-D-0888. This Supplemental Soil Assessment Letter Report addresses comments issued by the Florida Department of Environmental Protection (FDEP) in a technical review letter dated March 10, 2004.

SITE HISTORY

Tank G290-A is an aboveground storage tank (AST) located immediately north of Building 290A and southeast of the intersection of the north-south and east-west runways. Building 290A houses a standby generator for Building 290. Tank G290-A was installed in 1995, has a 250-gallon capacity, and is in compliance with State tank regulations. Tank G290-A replaced Tank G290-U, which was an underground storage tank located west of Building 290A. Tank G290-U was removed in November 1995 by Innovative Services International and received a clean closure.

Confirmatory soil screening was conducted by ABB Environmental Services, Inc. (ABB-ES) in 1998. Three soil borings were installed around the AST, and soil samples were collected for screening with an organic vapor analyzer (OVA). The results of that investigation indicated that contaminated soil was not present at the site. However, because the tanks could not be taken out of service at that time, it was agreed that supplemental confirmatory sampling would be conducted when the tanks were taken out of service or transferred to confirm that no releases had occurred subsequent to the original investigation.

A soil investigation was conducted by TtNUS between June 7 and 16, 2000. The Sampling and Analysis Plan (SAP) specified that existing monitoring well CEF-290-2S be sampled as part of the field investigation. However, when TtNUS personnel arrived at the site to conduct the investigation, the monitoring well could not be located. Therefore, a replacement monitoring well was installed and sampled in accordance with the SAP. Replacement well CEF-290A-2SR was installed on September 12, 2000, and sampled on September 26, 2000. The soil investigation indicated that soil boring B290-A-SB-005

(SB-005), located directly under the secondary containment drain, exhibited an OVA equipped with a flame ionization detector (FID) response of approximately 100 parts per million (ppm) at the 0- to 1-foot (ft) interval. The 1- to 3- and 3- to 5-ft sample intervals both exhibited responses of 20 ppm. Laboratory analytical results from the groundwater sample indicated that concentrations of contaminants of concern were less than detection limits, and the detection limits were less than the Groundwater Cleanup Target Levels (GCTLs) specified in Chapter 62-770, Florida Administrative Code (FAC). Based on the findings of this investigation and of the previous investigation conducted by ABB-ES, TtNUS recommended No Further Action for Tank Site G290-A.

An April 5, 2002, FDEP comment letter stated that the Department could not concur with the recommendation for No Further Action because an elevated OVA-FID response was detected in a surface soil sample collected from under the secondary containment drain, possibly indicating petroleum-impacted soil. The letter requested that a soil sample be collected from that location and analyzed for the gasoline analytical group (GAG) and kerosene analytical group (KAG) listed in Chapter 62-770, FAC, to determine if there has been a petroleum release requiring further assessment.

On April 12, 2002, TtNUS collected a soil sample from under the secondary containment drain, at the approximate location and depth interval of the elevated OVA-FID response [SB-005 at 0 to 1 ft below ground surface (bgs)]. The sample was analyzed for constituents of the GAG and KAG as defined by Chapter 62-770, FAC. The laboratory analytical results indicated that the total petroleum hydrocarbon (TPH) concentration exceeded the Soil Cleanup Target Level (SCTL) specified in Chapter 62-770, FAC. In addition, detection limits for several polynuclear aromatic hydrocarbons (PAHs) were elevated due to matrix interference. TtNUS recommended that a source removal be conducted to remove petroleum-impacted soil from the site. Prior to initiating the source removal, additional soil samples needed to be collected to delineate the extent of contaminated soil and to define the limits of the excavation.

An FDEP comment letter dated March 10, 2004, stated that the Department concurred that additional delineation to determine the extent of contaminated soil should be conducted prior to initiating source removal.

FIELD OPERATIONS

TtNUS mobilized to the site on March 22, 2005, for additional sampling and analysis of soil as proposed for delineation of soil to be excavated for the Tank G290-A, Building 290A. The general location within the former NAS Cecil Field Main Base is shown on the attached Figure 1. During this investigation, soils were screened with an OVA-FID at CEF-B290A-SB-006-01 located approximately 5 ft due north of CEF-B290A-SB-005 (see Figure 2). The screening intervals were the same as previously accomplished for this site on June 16, 2000, (0 to 1 ft bls, 1 to 3 ft bls, and 3 to 5 ft bls). Two locations (east and west of CEF-B290A-SB-005) were sampled, but were not be screened because OVA-FID data was generated for those approximate locations during the previous sampling event in June 2000. The two sampling locations are labeled CEF-B290A-SB-001-01 and CEF-B290A-SB-002-01 on the attached Figure 2. The screening was accomplished in accordance with Chapter 62-770.200(12), FAC.

The corrected screening data at CEF-B290A-SB-006-01 were then used to determine the depth of collection for the fixed-base laboratory samples. The depth to water was determined so that no laboratory sample was collected below the capillary fringe. The samples for CEF-B290A-SB-001-01 and CEF-B290A-SB-002-01 were collected from the same interval (0 to 1 ft bls) as previously collected at the CEF-B290A-SB-005 location.

The sampling activities and procedures were performed in general accordance with FDEP and TtNUS Standard Operating Procedures.

Following collection, the soil samples were placed on ice and shipped under chain of custody to Accutest Laboratories in Orlando, Florida for analysis. The samples were analyzed for PAHs using United States

Environmental Protection Agency Method SW-846 8310 and TPH using the Florida Petroleum Range Organics (FL-PRO) method.

RESULTS

Soil boring B290A-SB-006-001, located approximately 5 ft due north of CEF-B290A-SB-005, exhibited an OVA-FID response of approximately 0.2 ppm at the 0- to 1-ft interval. The 1- to 3- and 3- to 5- ft sample intervals did not exhibit OVA-FID responses. The general lithology of the soils excavated were silty fine-grained sands in various shades of gray and brown. The depth of the water table was 3.5 ft bgs at B290A-SB-006-001. The soil OVA-FID data collected during the investigation are summarized in Table 1.

The laboratory analytical results indicate that PAH concentrations for all three locations were less than the detection limit of the instrument, and TPH concentrations were less than the SCTLs specified in Chapter 62-770, FAC. The laboratory analytical results are summarized in Table 2, and the laboratory analytical report is provided in Attachment A.

CONCLUSIONS AND RECOMMENDATIONS

TtNUS recommends that a source removal be conducted to remove petroleum-impacted soil from an approximate 10-ft by 13-ft area as presented in Figure 3 and as delineated by the location of the three soil samples discussed in this report (CEF-B290A-SB-001-01, CEF-B290A-SB-002-01, and CEF-B290A-SB-006-01) as well as soil sampling locations previously screened by OVA-FID on June 16, 2000 (CEF-B290A-SB-003 and CEF-B290A-SB-004). The proposed area should be excavated to the top of the water table and replaced with clean fill material. To obtain site closure, post-excavation groundwater monitoring will be necessary in accordance with Chapter 62-770.750, FAC. Analyses should be for PAHs and TPH. Well CEF-290A-2SR and well CEF-290A-02S should be sampled for the post-excavation monitoring event. Figure 4 shows the monitoring well locations.

Since soil contamination at this site is restricted to shallow soils, post excavation monitoring is required for one event rather than quarterly. At the completion of monitoring, assuming GCTLs are not exceeded, a no further action proposal should be prepared in accordance with Chapter 62-780, FAC.

If you have any questions regarding the information presented in this document, please contact me by phone at (904) 636-6125 or via e-mail at Mark.Peterson@ttnus.com.

Sincerely,

Mark A. Peterson

Mark A. Peterson, P.G.
Task Order Manager
Florida License Number PG-0001852

Enclosures (6)

pc: G. Magwood, NAVFAC SE (CD only)
M. Halil, CH2M Hill (CD only)
M. Perry, TtNUS (unbound and CD)
D. Humbert, TtNUS (letter only)
M. Speranza, TtNUS (letter only)
M. Jonnet, TtNUS (Cecil DMS) (CD)
J. Logan, TtNUS
R. Simcik, TtNUS (Bookcase File)
J. Johnson, TtNUS (Information Repository) (CD)
CTO 0248 Project File

CERTIFICATION

The information contained is based on the geologic investigation and associated information detailed in the text and appended to this report. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of any additional information on the information described in this report. This Supplemental Soil Assessment Letter Report was developed for Tank G290-A at the Naval Air Station Cecil Field, Jacksonville, Florida, and should not be construed to apply to any other site.

November 9, 2006
Mark A. Peterson, P.G.
Florida License Number PG-0001852

TABLES

Table 1
Soil Vapor Field Screening Results

Building 290A, Tank G290-A
Naval Air Station Cecil Field
Jacksonville, Florida

Sample Identification	Depth (ft bgs)	OVA Result (ppm)			Lithologic Description	Analytical Sample	Analysis
CEF-B290A-SB		Unfiltered	Filtered	Net			
001	1	ND	ND	ND	Silty fine sand, light gray	CEF-B290A-SB001-01	PAHs by 8310 and TPH by FL-PRO
002	1	ND	ND	ND	Silty fine sand, light gray	CEF-B290A-SB002-01	PAHs by 8310 and TPH by FL-PRO
006	1	0.2	0.0	0.2	Silty fine sand, gray	CEF-B290A-SB006-01	PAHs by 8310 and TPH by FL-PRO
	2	0.0	ND	0.0	Silty fine sand, brown		
	4	0.0	0.0	0.0	Silty fine sand, brown		

Table 2
Summary of Soil Sample Analytical Results

Building 290A, Tank G290-A
Naval Air Station Cecil Field
Jacksonville, Florida

Compounds	SCTLs[1]			CEF-B290A-		
				SB-001-01	SB-002-01	SB-006-01
	Residential	Leachability	Industrial	1 ft bls	1 ft bls	1 ft bls
PAHs						
Acenaphthene	2,400	2.1	20,000	0.190 U	0.180 U	0.190 U
Acenaphthylene	1,800	27	20,000	0.190 U	0.180 U	0.190 U
Anthracene	21,000	2,500	300,000	0.190 U	0.180 U	0.190 U
Benzo(a)anthracene	#	0.8	#	0.093 U	0.088 U	0.095 U
Benzo(a)pyrene	0.1	8	0.7	0.019 U	0.018 U	0.019 U
Benzo(b)fluoranthene	#	2.4	#	0.019 U	0.018 U	0.019 U
Benzo(g,h,i)perylene	2,500	32,000	52,000	0.019 U	0.018 U	0.019 U
Benzo(k)fluoranthene	#	24	#	0.019 U	0.018 U	0.019 U
Chrysene	#	77	#	0.093 U	0.088 U	0.095 U
Dibenz(a,h)anthracene	#	0.7	#	0.019 U	0.018 U	0.019 U
Fluoranthene	3,200	1,200	59,000	0.093 U	0.088 U	0.095 U
Fluorene	2,600	160	33000	0.190 U	0.180 U	0.190 U
Indeno(1,2,3-cd)pyrene	#	6.6	#	0.019 U	0.018 U	0.019 U
Naphthalene	55	1.2	300	0.093 U	0.088 U	0.095 U
1-Methylnaphthalene	200	3.1	1800	0.093 U	0.088 U	0.095 U
2-Methylnaphthalene	210	8.5	2100	0.093 U	0.088 U	0.095 U
Phenanthrene	2,200	250	36000	0.190 U	0.180 U	0.190 U
Pyrene	2,400	880	45000	0.093 U	0.088 U	0.095 U
TPH (C8-C40)	460	340	2700	13.5	18.8	11.6
Benzo(a)pyrene Equivalents[2]	0.1	nc	0.8	0	0	0

Notes:

1 Established in Chapter 62-777, FAC.

All results are in milligrams per kilogram.

U = Indicates that the compound was analyzed for but not detected in excess the laboratory method detection limit.

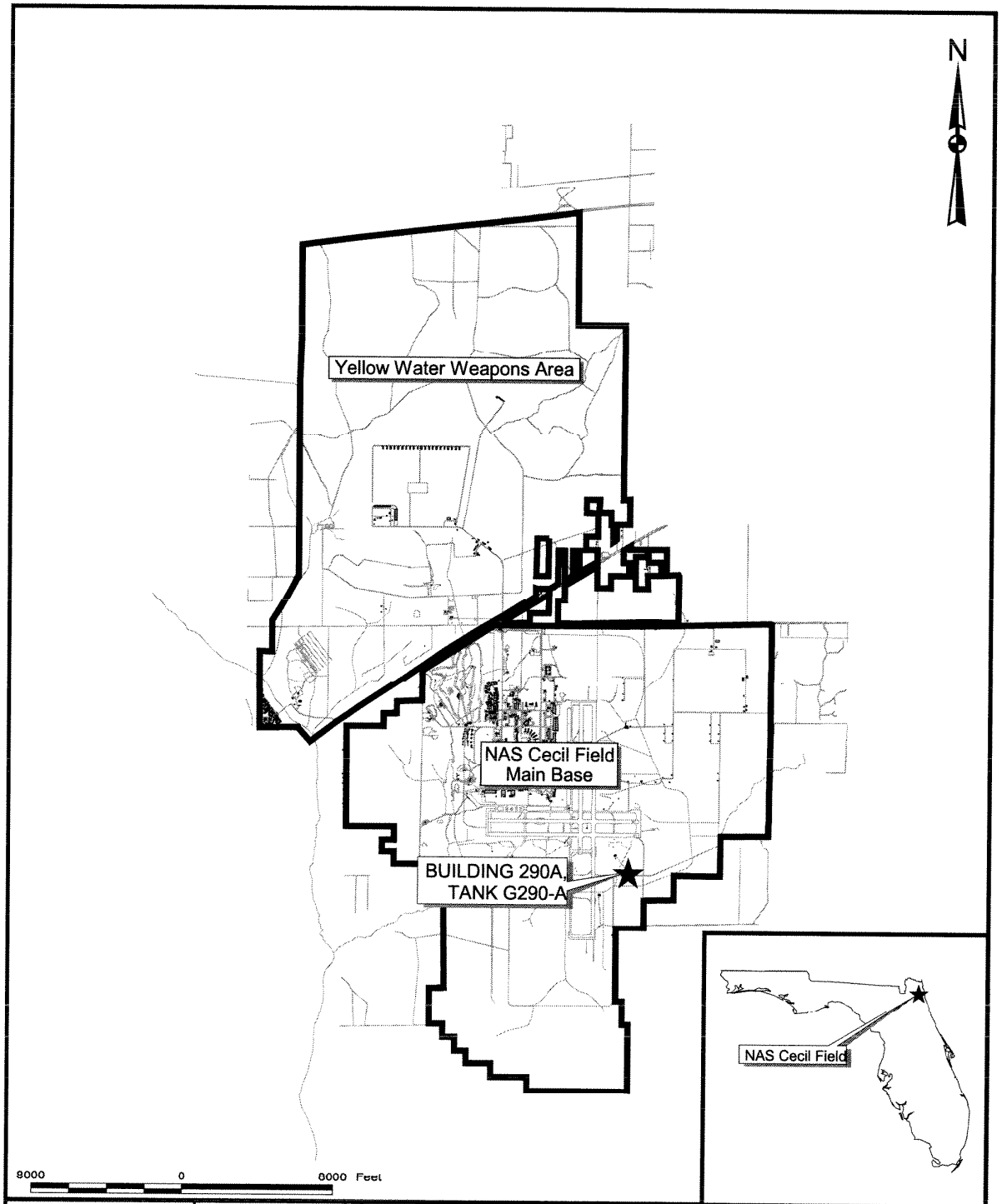
= Site concentrations of carcinogenic PAHs must be converted to benzo(a)pyrene equivalents before comparison with benzo(a)pyrene SCTLs for using the approach described.

in the February 2005 Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, FAC.

2 Calculated.

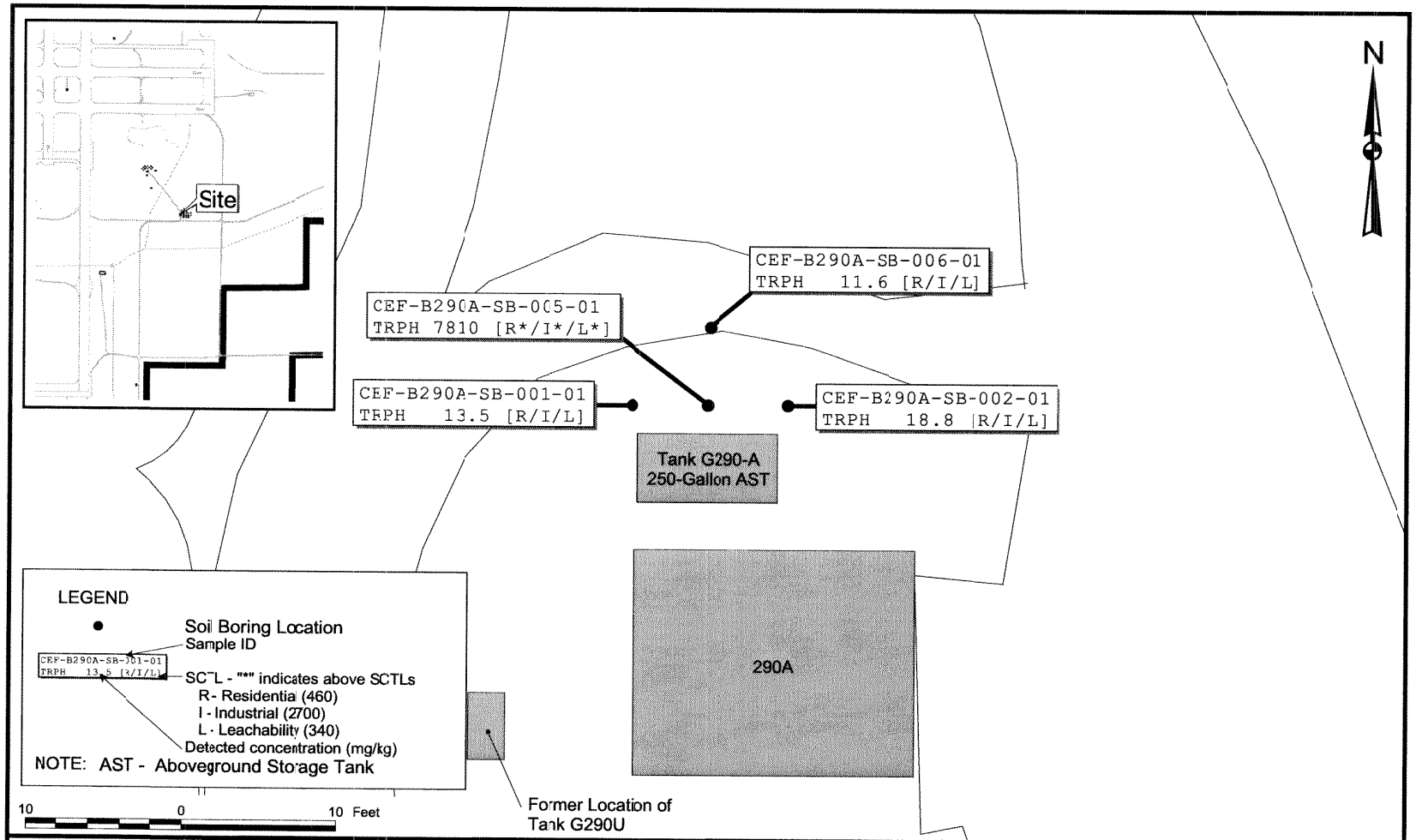
NC = no criterion.

FIGURES



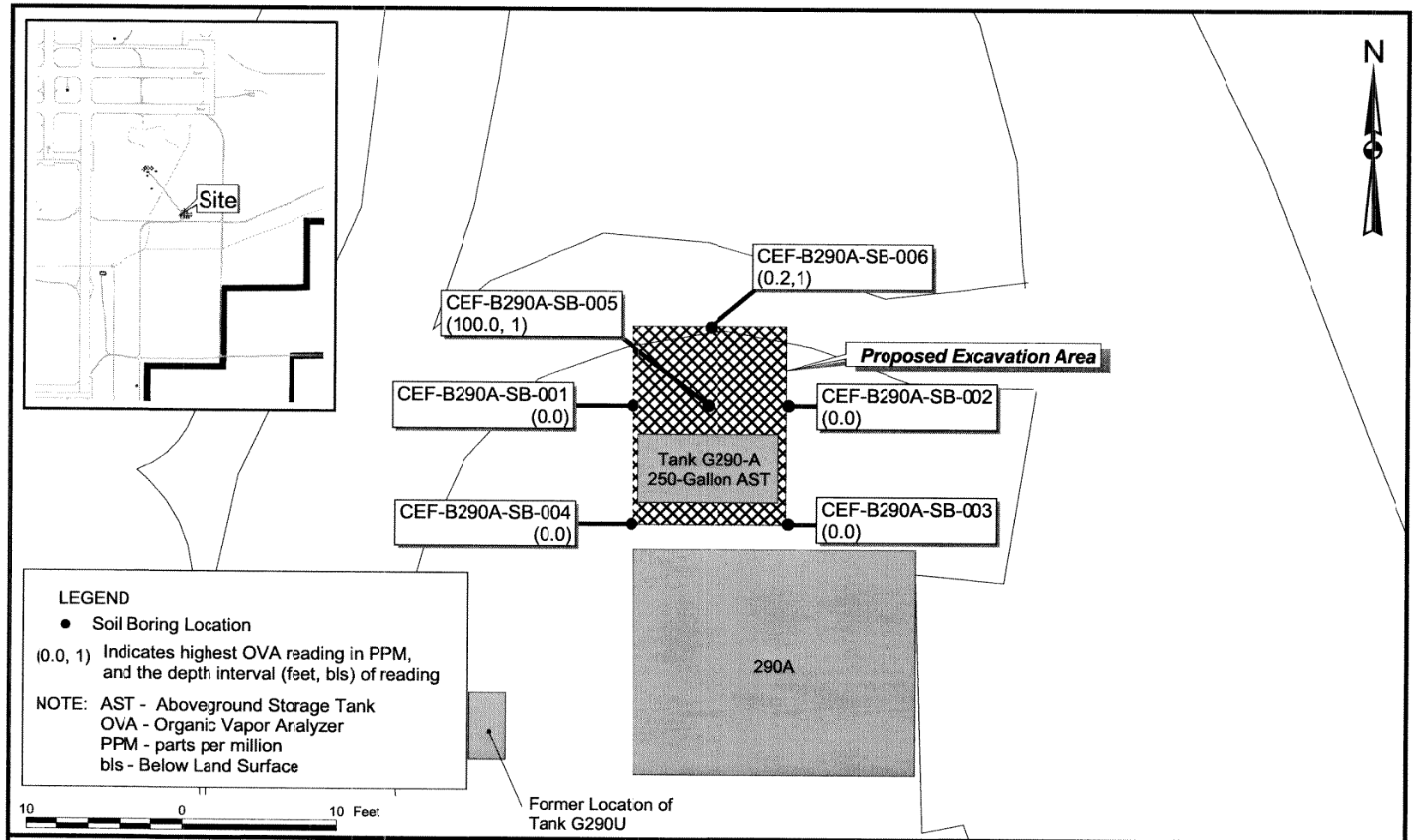
DRAWN BY MJJ	DATE 24Mar06	GENERAL LOCATION MAP BUILDING 290A, TANK G290-A NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 248
CHECKED BY	DATE		APPROVED BY / DATE
COST/SCHEDULE-AREA			APPROVED BY / DATE
SCALE AS NOTED			DRAWING NO. FIGURE 1 / REV 0

P:\GIS\CECIL\tank_g290a-2.apr 24Mar06 MJJ Layout3



DRAWN BY MJJ	DATE 25Aug05	SOIL SAMPLE LOCATION MAP BUILDING 290A, TANK G290-A NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 248
CHECKED BY	DATE		APPROVED BY DATE
COST/SCHEDULE-AREA			APPROVED BY DATE
SCALE AS NOTED	NAVFAC		DRAWING NO. FIGURE 2 / REV 0

P:\GIS\CECIL\tank_g290a-2.apr 25Aug05 MJJ.Layout1



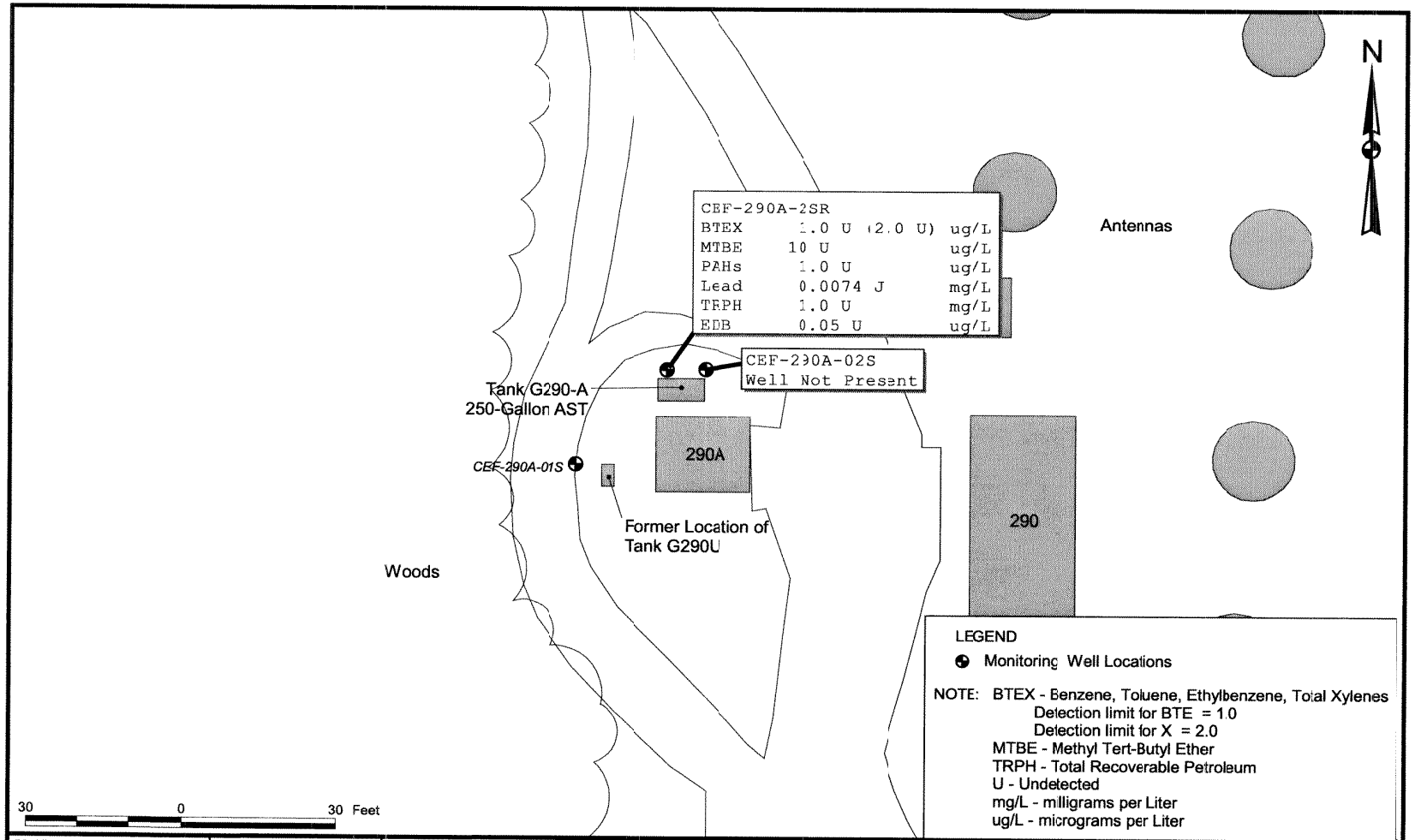
DRAWN BY	DATE
MJJ	25Aug05
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE	
AS NOTED	

NAVFAC

PROPOSED SOIL REMOVAL AREA
BUILDING 290A, TANK G290-A
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA

CONTRACT NUMBER	
248	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 3	REV 0

P:\GIS\CECIL\tank_g290a-2.apr 25Aug05 MJJ Layout2



DRAWN BY MJJ	DATE 15Nov00	GROUNDWATER MONITORING WELL LOCATIONS AND CONTAMINANT CONCENTRATIONS CONFIRMATORY SAMPLING REPORT BUILDING 290A, TANK G290-A NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA	CONTRACT NUMBER 121
CHECKED BY	DATE		APPROVED BY / DATE
COST/SCHEDULE-AREA			APPROVED BY / DATE
SCALE AS NOTED			DRAWING NO FIGURE 4 / REV 0

P:\GIS\CECIL\tank_g290a-l.apr 04Dec00 MJJLayout2

ATTACHMENT A

LABORATORY ANALYTICAL REPORT

Southeast
ACCUTEST.
Laboratories

04/13/05

Technical Report for

Tetra Tech NUS

NAS Cecil Field-CTO-248

N4242-WR#1001712/ Tank 290A

Accutest Job Number: F30558

Sampling Date: 03/22/05

Report to:

Tetra-Tech,Inc.
661 Andersen Drive
Foster Plaza 7
Pittsburgh, PA 15220

ATTN: Amy Thomson

Total number of pages in report: 263

ACCREDITED IN ACCORDANCE WITH nela

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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FULL LABORATORY DATA DELIVERABLES

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9. **GC SUPPORT DATA (METHOD FL PRO)**

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SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Tetra Tech NUS **Job No:** F30558

Site: NAS Cecil Field-CTO-248 **Report Date:** 4/13/2005 10:59:52

4 Samples were collected on 03/22/2005 and were received at Accutest on 03/23/2005 properly preserved, at 3.8 Deg. C and intact. These Samples received an Accutest job number of F30558. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC by Method SW846 8310

Matrix: SO **Batch ID:** OP12790

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F30558-1MS, F30558-1MSD were used as the QC samples indicated.

Extractables by GC by Method FLORIDA-PRO

Matrix: SO **Batch ID:** OP12789

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F30558-1MS, F30558-1MSD were used as the QC samples indicated.

Wet Chemistry by Method EPA 160.3 M

Matrix: SO **Batch ID:** GN16921

Sample F30596-2DUP was used as the QC sample for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Ellen Pampel, Inorganic QA (signature on file)

Date: April 13, 2005

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F30558 CLIENT: Tetra Tech PROJECT: N4242, CTO 248

DATE/TIME RECEIVED: 3/23/05 9:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 3.8

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS:

COOLER INFORMATION

- [x] CUSTODY SEAL NOT PRESENT/INTACT
- [ ] NO COC RECEIVED
- [ ] ANALYSES NOT MARKED ON COC
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [x] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] SAMPLE RECEIVED PAST HOLD TIME
- [ ] TIMES ON COC DON'T MATCH LABEL
- [ ] ID'S ON COC DON'T MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED

SOIL INFORMATION

NUMBER OF ENCORES ? Ø

NUMBER OF 5035 FIELD KITS ? Ø

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 3/23/05 TECHNICIAN SIGNATURE/DATE

0006

ASBD02/04/05

TETRA TECH NUS, INC. F305558 CHAIN OF CUSTODY | NUMBER 290A-032105 | PAGE 1 OF 1

PROJECT NO: N4242 CTO 248	FACILITY: NASCF, TANK 290A	PROJECT MANAGER: PAUL CALLIGAN	PHONE NUMBER: 813 806 0202
LABORATORY NAME AND CONTACT: ACCUTEST H. WANDRAY		SAMPLERS (SIGNATURE): Merwin W. Dale	FIELD OPERATIONS LEADER: MERV DALE
PHONE NUMBER: 904 636 6125	ADDRESS: 4405 Vineland Rd., C-15	CARRIER/WAYBILL NUMBER: Fedex 8427 1834 9649	CITY, STATE: ORLANDO, FL 32811

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

	DATE YEAR 2005	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	PAHs SW8270 8310	TRPH FL-PRO						COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)										G	G						
PRESERVATIVE USED										None	None						
1	03/22	1125	CEF-B290A-SB006-01 *		0	1	SO	G	4	2	2						Cool to 4°C
2	03/22	1140	CEF-B290A-SB001-01		0	1	SO	G	2	1	1						
3	03/22	1153	CEF-B290A-SB002-01		0	1	SO	G	2	1	1						Work Release
4	03/22	0000	CEF-B290A-SB-D002		0	1	SO	G	2	1	1						1001712
																	* Use extra volume for Lab MS/MSD.

MWD

1. RELINQUISHED BY: Merwin W. Dale	DATE 03/22/05	TIME 1600	1. RECEIVED BY: Fedex	DATE 03/22/05	TIME —
2. RELINQUISHED BY: FX	DATE 3/23/05	TIME 9:00	2. RECEIVED BY: [signature]	DATE 3/23/05	TIME 9:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS 0008

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY)

4/02R

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB006-01		
Lab Sample ID:	F30558-1	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	86.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004064.D	1	03/25/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	190 U	760	190	ug/kg	
208-96-8	Acenaphthylene	190 U	760	190	ug/kg	
120-12-7	Anthracene	190 U	380	190	ug/kg	
56-55-3	Benzo(a)anthracene	95 U	380	95	ug/kg	
50-32-8	Benzo(a)pyrene	19 U	76	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	19 U	76	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	19 U	76	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	19 U	76	19	ug/kg	
218-01-9	Chrysene	95 U	380	95	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	19 U	76	19	ug/kg	
206-44-0	Fluoranthene	95 U	380	95	ug/kg	
86-73-7	Fluorene	190 U	380	190	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	19 U	76	19	ug/kg	
91-20-3	Naphthalene	95 U	380	95	ug/kg	
90-12-0	1-Methylnaphthalene	95 U	380	95	ug/kg	
91-57-6	2-Methylnaphthalene	95 U	380	95	ug/kg	
85-01-8	Phenanthrene	190 U	380	190	ug/kg	
129-00-0	Pyrene	95 U	380	95	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	53%		49-124%
92-94-4	p-Terphenyl	57%		56-141%

0010

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB001-01		
Lab Sample ID:	F30558-2	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004067.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	190 U	750	190	ug/kg	
208-96-8	Acenaphthylene	190 U	750	190	ug/kg	
120-12-7	Anthracene	190 U	370	190	ug/kg	
56-55-3	Benzo(a)anthracene	93 U	370	93	ug/kg	
50-32-8	Benzo(a)pyrene	19 U	75	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	19 U	75	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	19 U	75	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	19 U	75	19	ug/kg	
218-01-9	Chrysene	93 U	370	93	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	19 U	75	19	ug/kg	
206-44-0	Fluoranthene	93 U	370	93	ug/kg	
86-73-7	Fluorene	190 U	370	190	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	19 U	75	19	ug/kg	
91-20-3	Naphthalene	93 U	370	93	ug/kg	
90-12-0	1-Methylnaphthalene	93 U	370	93	ug/kg	
91-57-6	2-Methylnaphthalene	93 U	370	93	ug/kg	
85-01-8	Phenanthrene	190 U	370	190	ug/kg	
129-00-0	Pyrene	93 U	370	93	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		49-124%
92-94-4	p-Terphenyl	91%		56-141%

0011

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB002-01		
Lab Sample ID:	F30558-3	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	93.8
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004068.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	180 U	710	180	ug/kg	
208-96-8	Acenaphthylene	180 U	710	180	ug/kg	
120-12-7	Anthracene	180 U	350	180	ug/kg	
56-55-3	Benzo(a)anthracene	88 U	350	88	ug/kg	
50-32-8	Benzo(a)pyrene	18 U	71	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	18 U	71	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	18 U	71	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	18 U	71	18	ug/kg	
218-01-9	Chrysene	88 U	350	88	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18 U	71	18	ug/kg	
206-44-0	Fluoranthene	88 U	350	88	ug/kg	
86-73-7	Fluorene	180 U	350	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	18 U	71	18	ug/kg	
91-20-3	Naphthalene	88 U	350	88	ug/kg	
90-12-0	1-Methylnaphthalene	88 U	350	88	ug/kg	
91-57-6	2-Methylnaphthalene	88 U	350	88	ug/kg	
85-01-8	Phenanthrene	180 U	350	180	ug/kg	
129-00-0	Pyrene	88 U	350	88	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		49-124%
92-94-4	p-Terphenyl	87%		56-141%

0012

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB-DU02		
Lab Sample ID:	F30558-4	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	89.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004069.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	180 U	730	180	ug/kg	
208-96-8	Acenaphthylene	180 U	730	180	ug/kg	
120-12-7	Anthracene	180 U	370	180	ug/kg	
56-55-3	Benzo(a)anthracene	92 U	370	92	ug/kg	
50-32-8	Benzo(a)pyrene	18 U	73	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	18 U	73	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	18 U	73	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	18 U	73	18	ug/kg	
218-01-9	Chrysene	92 U	370	92	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18 U	73	18	ug/kg	
206-44-0	Fluoranthene	92 U	370	92	ug/kg	
86-73-7	Fluorene	180 U	370	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	18 U	73	18	ug/kg	
91-20-3	Naphthalene	92 U	370	92	ug/kg	
90-12-0	1-Methylnaphthalene	92 U	370	92	ug/kg	
91-57-6	2-Methylnaphthalene	92 U	370	92	ug/kg	
85-01-8	Phenanthrene	180 U	370	180	ug/kg	
129-00-0	Pyrene	92 U	370	92	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		49-124%
92-94-4	p-Terphenyl	92%		56-141%

0013

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Method Blank Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12790-MB	PP004056.D	1	03/25/05	MRE	03/24/05	OP12790	GPP162

The QC reported here applies to the following samples: **Method:** SW846 8310

F30558-1, F30558-2, F30558-3, F30558-4

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	670	170	ug/kg	
208-96-8	Acenaphthylene	ND	670	170	ug/kg	
120-12-7	Anthracene	ND	330	170	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	83	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	17	ug/kg	
218-01-9	Chrysene	ND	330	83	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	17	ug/kg	
206-44-0	Fluoranthene	ND	330	83	ug/kg	
86-73-7	Fluorene	ND	330	170	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	17	ug/kg	
91-20-3	Naphthalene	ND	330	83	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	83	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	83	ug/kg	
85-01-8	Phenanthrene	ND	330	170	ug/kg	
129-00-0	Pyrene	ND	330	83	ug/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	99%	49-124%
92-94-4	p-Terphenyl	102%	56-141%

0014

Method Blank Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12790-MB	PP004073.D	1	03/28/05	MRE	03/24/05	OP12790	GPP163

The QC reported here applies to the following samples: **Method:** SW846 8310

F30558-1, F30558-2, F30558-3, F30558-4

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	670	170	ug/kg	
208-96-8	Acenaphthylene	ND	670	170	ug/kg	
120-12-7	Anthracene	ND	330	170	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	83	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	17	ug/kg	
218-01-9	Chrysene	ND	330	83	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	17	ug/kg	
206-44-0	Fluoranthene	ND	330	83	ug/kg	
86-73-7	Fluorene	ND	330	170	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	17	ug/kg	
91-20-3	Naphthalene	ND	330	83	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	83	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	83	ug/kg	
85-01-8	Phenanthrene	ND	330	170	ug/kg	
129-00-0	Pyrene	ND	330	83	ug/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	99%	49-124%
92-94-4	p-Terphenyl	102%	56-141%

0015

Blank Spike Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12790-BS	PP004055.D	1	03/25/05	MRE	03/24/05	OP12790	GPP162

The QC reported here applies to the following samples: **Method:** SW846 8310

F30558-1, F30558-2, F30558-3, F30558-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	3330	3370	101	67-112
208-96-8	Acenaphthylene	3330	3280	98	64-110
120-12-7	Anthracene	1670	1850	111	78-117
56-55-3	Benzo(a)anthracene	1670	1780	107	80-120
50-32-8	Benzo(a)pyrene	1670	1820	109	76-120
205-99-2	Benzo(b)fluoranthene	1670	1810	109	80-126
191-24-2	Benzo(g,h,i)perylene	1670	1820	109	81-122
207-08-9	Benzo(k)fluoranthene	1670	1870	112	79-126
218-01-9	Chrysene	1670	1820	109	79-123
53-70-3	Dibenzo(a,h)anthracene	1670	1820	109	81-124
206-44-0	Fluoranthene	3330	3600	108	77-119
86-73-7	Fluorene	3330	3470	104	69-114
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1840	110	81-125
91-20-3	Naphthalene	3330	3060	92	57-101
90-12-0	1-Methylnaphthalene	3330	3200	96	60-104
91-57-6	2-Methylnaphthalene	3330	3230	97	61-105
85-01-8	Phenanthrene	3330	3590	108	72-116
129-00-0	Pyrene	3330	3630	109	77-119

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	100%	49-124%
92-94-4	p-Terphenyl	101%	56-141%

0016

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12790-MS	PP004065.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
OP12790-MSD	PP004066.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
F30558-1	PP004064.D	1	03/25/05	MRE	03/24/05	OP12790	GPP162

The QC reported here applies to the following samples: **Method:** SW846 8310

F30558-1, F30558-2, F30558-3, F30558-4

CAS No.	Compound	F30558-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	760 U		3830	3690	96	3660	97	1	51-123/25
208-96-8	Acenaphthylene	760 U		3830	3600	94	3570	95	1	48-121/27
120-12-7	Anthracene	380 U		1910	2010	105	1980	105	2	65-125/20
56-55-3	Benzo(a)anthracene	380 U		1910	1940	101	1890	100	3	57-132/20
50-32-8	Benzo(a)pyrene	76 U		1910	2000	104	1930	103	4	61-128/21
205-99-2	Benzo(b)fluoranthene	76 U		1910	1950	102	1920	102	2	57-138/21
191-24-2	Benzo(g,h,i)perylene	76 U		1910	1930	101	1880	100	3	60-131/20
207-08-9	Benzo(k)fluoranthene	76 U		1910	1970	103	1990	106	1	58-134/20
218-01-9	Chrysene	380 U		1910	1970	103	1920	102	3	65-132/21
53-70-3	Dibenzo(a,h)anthracene	76 U		1910	1970	103	1930	103	2	61-132/19
206-44-0	Fluoranthene	380 U		3830	3910	102	3860	103	1	63-127/21
86-73-7	Fluorene	380 U		3830	3770	98	3750	100	1	46-133/23
193-39-5	Indeno(1,2,3-cd)pyrene	76 U		1910	1950	102	1930	103	1	68-127/20
91-20-3	Naphthalene	380 U		3830	3250	85	3260	87	0	44-107/28
90-12-0	1-Methylnaphthalene	380 U		3830	3470	91	3460	92	0	44-115/26
91-57-6	2-Methylnaphthalene	380 U		3830	3490	91	3480	92	0	44-117/26
85-01-8	Phenanthrene	380 U		3830	3880	101	3860	103	1	59-122/21
129-00-0	Pyrene	380 U		3830	3950	103	3890	103	2	61-127/21

CAS No.	Surrogate Recoveries	MS	MSD	F30558-1	Limits
84-15-1	o-Terphenyl	93%	97%	53%	49-124%
92-94-4	p-Terphenyl	95%	97%	57%	56-141%

0017

Semivolatile Surrogate Recovery Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Method: SW846 8310 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F30558-1	PP004064.D	53.0	57.0
F30558-2	PP004067.D	88.0	91.0
F30558-3	PP004068.D	86.0	87.0
F30558-4	PP004069.D	90.0	92.0
OP12790-BS	PP004055.D	100.0	101.0
OP12790-MB	PP004056.D	99.0	102.0
OP12790-MB	PP004073.D	99.0	102.0
OP12790-MS	PP004065.D	93.0	95.0
OP12790-MSD	PP004066.D	97.0	97.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	49-124%
S2 = p-Terphenyl	56-141%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Check Std:	GPP162-CC107	**Injection Date:**	03/25/05
Lab File ID:	PP004054.D	**Injection Time:**	20:48
Instrument ID:	GCPP	**Method:**	SW846 8310

	S1 [a] RT	S2 [a] RT
Check Std	6.52	8.49

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP12790-BS	PP004055.D	03/25/05	21:07	6.52	8.49
OP12790-MB	PP004056.D	03/25/05	21:26	6.52	8.48
ZZZZZZ	PP004057.D	03/25/05	21:45	6.52	8.49
ZZZZZZ	PP004058.D	03/25/05	22:04	6.52	8.48
ZZZZZZ	PP004059.D	03/25/05	22:23	6.52	8.48
ZZZZZZ	PP004060.D	03/25/05	22:42	6.52	8.48

Surrogate Compounds

S1 = o-Terphenyl
S2 = p-Terphenyl

(a) Retention time from GC signal #1

0019

GC Surrogate Retention Time Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Check Std:	GPP162-CC107	**Injection Date:**	03/25/05
Lab File ID:	PP004062.D	**Injection Time:**	23:21
Instrument ID:	GCPP	**Method:**	SW846 8310

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	6.52	6.52	8.48	8.48

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	PP004063.D	03/25/05	23:40	6.52		8.48	
F30558-1	PP004064.D	03/25/05	23:59	6.52		8.48	
OP12790-MS	PP004065.D	03/26/05	00:18	6.52		8.48	
OP12790-MSD	PP004066.D	03/26/05	00:37	6.52		8.48	
F30558-2	PP004067.D	03/26/05	00:56	6.53		8.48	
F30558-3	PP004068.D	03/26/05	01:15	6.53		8.48	
F30558-4	PP004069.D	03/26/05	01:34	6.53		8.48	
GPP162-ECC107	PP004070.D	03/26/05	01:53	6.53	6.53	8.48	8.48

Surrogate Compounds

S1 = o-Terphenyl
S2 = p-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

0020

GC Surrogate Retention Time Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Check Std:	GPP163-CC107	**Injection Date:**	03/28/05
Lab File ID:	PP004072.D	**Injection Time:**	13:48
Instrument ID:	GCPP	**Method:**	SW846 8310

	S1 [a] RT	S2 [a] RT
Check Std	6.52	8.48

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP12790-MB	PP004073.D	03/28/05	14:07	6.52	8.47
ZZZZZZ	PP004074.D	03/28/05	14:26	6.52	8.48
OP12754-BS	PP004075.D	03/28/05	14:45	6.52	8.48
OP12754-MB	PP004076.D	03/28/05	15:04	6.52	8.48
ZZZZZZ	PP004077.D	03/28/05	15:23	6.52	8.48
ZZZZZZ	PP004078.D	03/28/05	15:42	6.52	8.48
F30432-8	PP004079.D	03/28/05	16:02	6.51	8.48
OP12754-MS	PP004080.D	03/28/05	16:21	6.52	8.48
OP12754-MSD	PP004081.D	03/28/05	16:40	6.52	8.48

Surrogate Compounds

S1 = o-Terphenyl
S2 = p-Terphenyl

(a) Retention time from GC signal #1

0021

Initial Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP107-ICC107
Lab FileID: PP002554.D

Response Factor Report G1315B

Method : C:\HPCHEM\2\METHODS\8310_32.M (Chemstation Integrator)
Title : PAH's BY EPA 8310
Last Update : Fri Jan 07 10:38:21 2005
Response via : Initial Calibration

Calibration Files
L1 =PP002551.D L2 =PP002552.D L3 =PP002553.D L4 =PP002554.D
L5 =PP002555.D L6 =PP002556.D L7 =PP002557.D ICV =PP002558.D

Compound	L1	L2	L3	L4	L5	L6	L7	ICV	Avg		%RSD
1) Naphthalene	5.004	4.797	4.920	5.002	5.009	4.941	4.984	4.785	4.930	E5	1.86
2) Acenaphthyle	2.057	1.922	1.948	1.960	2.004	1.972	1.992	1.913	1.971	E5	2.37
3) 1-Methyl Nap	4.070	3.987	4.089	4.070	4.169	4.105	4.151	4.142	4.098	E5	1.43
4) 2-Methyl Nap	4.065	4.022	4.138	4.121	4.223	4.163	4.222	3.990	4.118	E5	2.11
5) Acenaphthene	2.888	2.881	2.980	2.963	3.034	2.986	3.033	2.940	2.963	E5	1.96
6) Fluorene	1.158	1.126	1.153	1.147	1.174	1.154	1.169	1.119	1.150	E6	1.66
7) Phenanthrene	1.026	0.975	0.993	0.984	1.004	0.987	0.999	0.969	0.992	E6	1.81
8) O-Terphenyl	3.932	3.512	3.637	3.593	3.668	3.591	3.664		3.657	E5	3.63
9) Anthracene	1.285	1.152	1.300	1.223	1.167	1.104	1.090	1.086	1.176	E5	7.25
10) Fluoranthene	8.381	8.035	8.310	8.259	8.452	8.289	8.359	8.153	8.280	E5	1.60
11) Pyrene	1.314	1.255	1.290	1.274	1.285	1.237	1.206	1.258	1.265	E6	2.65
12) P-Terphenyl	1.420	1.329	1.354	1.349	1.383	1.399	1.410		1.378	E6	2.50
13) Benzo(a)Anth	2.292	2.172	2.216	2.204	2.256	2.213	2.221	2.170	2.218	E6	1.84
14) Chrysene	2.964	2.816	2.861	2.830	2.851	2.756	2.657	2.748	2.810	E6	3.26
15) Benzo(b)Fluo	1.095	1.062	1.085	1.086	1.116	1.096	1.107	1.074	1.090	E6	1.59
16) Benzo(k)Fluo	6.389	6.027	6.173	6.307	6.530	6.408	6.465	6.311	6.326	E5	2.57
17) Benzo(a) Pyr	1.136	1.105	1.139	1.140	1.175	1.157	1.175	1.100	1.141	E6	2.47
18) Dibenzo(a,h)	9.502	8.980	9.196	9.208	9.449	9.275	9.371	8.965	9.243	E5	2.15
19) Benzo(g,h,i)	6.093	5.833	5.954	5.965	6.170	6.115	6.213	6.217	6.070	E5	2.29
20) Indeno(1,2,3	5.098	4.590	4.730	4.735	4.841	4.762	4.808	4.588	4.769	E5	3.38

Signal #2

1) Naphthalene	2.815	2.800	2.814	2.829	2.941	2.911	2.931	2.805	2.856	E5	2.12
2) Acenaphthyle	2.039	1.935	1.976	1.960	1.994	1.993	2.008	1.942	1.981	E5	1.75
3) 1-Methyl Nap	1.735	1.731	1.774	1.763	1.797	1.779	1.794	1.787	1.770	E5	1.42
4) 2-Methyl Nap	2.484	2.437	2.504	2.500	2.552	2.524	2.546	2.406	2.494	E5	2.04
5) Acenaphthene	1.093	1.073	1.014	1.035	1.050	1.010	1.014	0.995	1.035	E5	3.28
6) Fluorene	1.297	1.252	1.281	1.276	1.305	1.287	1.295	1.241	1.279	E6	1.76
7) Phenanthrene	3.449	3.320	3.378	3.343	3.367	3.236	2.972	3.319	3.298	E6	4.40
8) O-Terphenyl	6.615	6.051	6.088	6.091	6.218	6.095	6.176		6.190	E5	3.16
9) Anthracene	7.263	6.950	6.988	6.777	6.405	5.707	4.645	6.033	6.346	E6	13.59
10) Fluoranthene	8.094	7.796	8.073	8.124	8.300	8.155	8.264	8.045	8.106	E5	1.90
11) Pyrene	7.397	7.098	7.383	7.364	7.531	7.358	7.433	7.215	7.347	E5	1.82
12) P-Terphenyl	7.039	6.588	6.712	6.686	6.849	6.915	7.000		6.827	E5	2.49
13) Benzo(a)Anth	1.666	1.606	1.636	1.632	1.672	1.645	1.663	1.608	1.641	E6	1.55
14) Chrysene	2.386	2.296	2.343	2.333	2.381	2.336	2.336	2.267	2.335	E6	1.70
15) Benzo(b)Fluo	0.977	0.966	0.987	0.982	1.004	0.989	0.992	0.966	0.983	E6	1.32
16) Benzo(k)Fluo	1.508	1.424	1.460	1.459	1.495	1.473	1.485	1.439	1.468	E6	1.91
17) Benzo(a) Pyr	9.534	9.100	9.347	9.342	9.562	9.397	9.457	8.980	9.340	E5	2.18
18) Dibenzo(a,h)	2.416	2.326	2.371	2.363	2.391	2.321	2.291	2.303	2.348	E6	1.88
19) Benzo(g,h,i)	0.994	0.957	0.981	0.981	1.010	0.995	1.006	0.970	0.987	E6	1.83
20) Indeno(1,2,3	6.944	6.390	6.636	6.619	6.791	6.684	6.757	6.533	6.669	E5	2.5[illegible]

(#) = Out of Range ### Number of calibration levels exceeded format ###

8310_32.M Fri Jan 07 10:42:31 2005

6022

Initial Calibration Verification

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP107-ICV107
Lab FileID: PP002558.D

Evaluate Continuing Calibration Report

Signal #1 : P:\HPCHEM\1\DATA\0106PAH\PP002558.D\dad1B.ch Vial: 10
Signal #2 : P:\HPCHEM\1\DATA\0106PAH\PP002558.D\dad1A.ch
Acq On : 06-Jan-2005, 15:22:11 Operator: MIKEE
Sample : ICV107-20 Inst : G1315B
Misc : OP12194,gpp107,1000,,,1,,water Multiplr: 1.00
IntFile Signal #1: EVENTS2.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8310_32.M (Chemstation Integrator)
Title : PAH's BY EPA 8310
Last Update : Fri Jan 07 10:38:21 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.411	2.9	100	0.00	3.85- 4.35
2		Acenaphthylene	20.000	19.408	3.0	100	0.00	4.37- 4.87
3		1-Methyl Naphthalene	20.000	20.218	-1.1	100	0.00	4.73- 5.23
4		2-Methyl Naphthalene	20.000	19.377	3.1	100	0.00	4.93- 5.43
5		Acenaphthene	20.000	19.847	0.8	100	0.00	5.16- 5.66
6		Fluorene	20.000	19.461	2.7	100	0.00	5.31- 5.81
7		Phenanthrene	10.000	9.771	2.3	100	0.00	5.88- 6.38
8	S	O-Terphenyl		----------NA----------				
9		Anthracene	20.000	18.474	7.6	100	0.00	6.44- 6.94
10		Fluoranthene	10.000	9.846	1.5	100	0.00	7.01- 7.51
11		Pyrene	10.000	9.945	0.5	100	0.00	7.48- 7.98
12	S	P-Terphenyl		----------NA----------				
13		Benzo(a)Anthracene	10.000	9.782	2.2	100	0.00	8.70- 9.20
14		Chrysene	10.000	9.778	2.2	100	0.00	9.01- 9.51
15		Benzo(b)Fluoranthene	10.000	9.854	1.5	100	0.01	9.90-10.40
16		Benzo(k)Fluoranthene	10.000	9.976	0.2	100	0.01	10.38-10.88
17		Benzo(a) Pyrene	10.000	9.644	3.6	100	0.01	10.88-11.38
18		Dibenzo(a,h)anthracene	10.000	9.699	3.0	100	0.03	11.37-12.37
19		Benzo(g,h,i) Perylene	10.000	10.243	-2.4	100	0.03	12.04-13.04
20		Indeno(1,2,3-cd)pyrene	10.000	9.621	3.8	100	0.03	12.49-13.49

***** Signal #2 *****

1		Naphthalene	20.000	19.647	1.8	100	0.00	3.85- 4.35
2		Acenaphthylene	20.000	19.613	1.9	100	0.00	4.37- 4.87
3		1-Methyl Naphthalene	20.000	20.195	-1.0	100	0.00	4.73- 5.23
4		2-Methyl Naphthalene	20.000	19.297	3.5	100	0.00	4.93- 5.43
5		Acenaphthene	20.000	19.216	3.9	100	0.00	5.16- 5.66
6		Fluorene	20.000	19.397	3.0	100	0.00	5.31- 5.81
7		Phenanthrene	10.000	10.063	-0.6	100	0.00	5.88- 6.38
8	S	O-Terphenyl		----------NA----------				
9		Anthracene	20.000	19.014	4.9	100	0.00	6.44- 6.94
10		Fluoranthene	10.000	9.925	0.7	100	0.00	7.01- 7.51
11		Pyrene	10.000	9.819	1.8	100	0.00	7.48- 7.98
12	S	P-Terphenyl		----------NA----------				
13		Benzo(a)Anthracene	10.000	9.797	2.0	100	0.00	8.70- 9.20
14		Chrysene	10.000	9.709	2.9	100	0.00	9.01- 9.51
15		Benzo(b)Fluoranthene	10.000	9.831	1.7	100	0.01	9.90-10.40
16		Benzo(k)Fluoranthene	10.000	9.801	2.0	100	0.01	10.38-10.88
17		Benzo(a) Pyrene	10.000	9.615	3.8	100	0.01	10.88-11.38
18		Dibenzo(a,h)anthracene	10.000	9.809	1.9	100	0.03	11.37-12.37

0023

Initial Calibration Verification

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP107-ICV107
Lab FileID: PP002558.D

19	Benzo(g,h,i) Perylene	10.000	9.827	1.7	100	0.03	12.04-13.04
20	Indeno(1,2,3-cd)pyrene	10.000	9.796	2.0	100	0.03	12.49-13.49

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PP002558.D 8310_32.M Fri Jan 07 10:42:57 2005

0024

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP162-CC107
Lab FileID: PP004054.D

Evaluate Continuing Calibration Report

Signal #1 : P:\HPCHEM\1\DATA\0325PAH\PP004054.D\dad1B.ch Vial: 3
Signal #2 : P:\HPCHEM\1\DATA\0325PAH\PP004054.D\dad1A.ch
Acq On : 25-Mar-2005, 20:48:15 Operator: MIKEE
Sample : CC107-20 Inst : G1315B
Misc : OP12796,gpp162,1000,,,1,,water Multiplr: 1.00
IntFile Signal #1: EVENTS1.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8310_32.M (Chemstation Integrator)
Title : PAH's BY EPA 8310
Last Update : Tue Mar 01 14:00:58 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.322	-1.6	100	0.00	3.93- 4.43
2		Acenaphthylene	20.000	19.992	0.0	101	0.00	4.47- 4.97
3		1-Methyl Naphthalene	20.000	20.260	-1.3	102	0.00	4.83- 5.33
4		2-Methyl Naphthalene	20.000	20.537	-2.7	103	0.00	5.02- 5.52
5		Acenaphthene	20.000	20.316	-1.6	102	0.00	5.24- 5.74
6		Fluorene	20.000	20.419	-2.1	102	0.00	5.40- 5.90
7		Phenanthrene	20.000	20.173	-0.9	102	0.00	5.97- 6.47
8	S	O-Terphenyl	20.000	20.405	-2.0	104	0.00	6.26- 6.76
9		Anthracene	10.000	10.376	-3.8	100	0.00	6.53- 7.03
10		Fluoranthene	20.000	20.766	-3.8	104	0.01	7.11- 7.61
11		Pyrene	20.000	20.604	-3.0	102	0.00	7.57- 8.07
12	S	P-Terphenyl	20.000	20.999	-5.0	107	0.01	8.22- 8.72
13		Benzo(a)Anthracene	10.000	10.018	-0.2	101	0.02	8.78- 9.28
14		Chrysene	10.000	10.135	-1.3	101	0.02	9.09- 9.59
15		Benzo(b)Fluoranthene	10.000	10.038	-0.4	101	0.02	9.99-10.49
16		Benzo(k)Fluoranthene	10.000	10.235	-2.3	103	0.02	10.48-10.98
17		Benzo(a) Pyrene	10.000	10.525	-5.3	105	0.02	10.99-11.49
18		Dibenzo(a,h)anthracene	10.000	10.059	-0.6	101	0.03	11.52-12.52
19		Benzo(g,h,i) Perylene	10.000	10.141	-1.4	103	0.03	12.19-13.19
20		Indeno(1,2,3-cd)pyrene	10.000	10.073	-0.7	101	0.03	12.66-13.66

***** Signal #2 *****

1		Naphthalene	20.000	20.366	-1.8	103	0.00	3.93- 4.43
2		Acenaphthylene	20.000	19.975	0.1	101	0.00	4.47- 4.97
3		1-Methyl Naphthalene	20.000	20.317	-1.6	102	0.00	4.83- 5.33
4		2-Methyl Naphthalene	20.000	20.556	-2.8	103	0.00	5.02- 5.52
5		Acenaphthene	20.000	19.900	0.5	99	0.00	5.24- 5.74
6		Fluorene	20.000	20.435	-2.2	102	0.00	5.40- 5.90
7		Phenanthrene	20.000	20.672	-3.4	102	0.00	5.97- 6.47
8	S	O-Terphenyl	20.000	20.500	-2.5	104	0.00	6.26- 6.76
9		Anthracene	10.000	10.971	-9.7	103	0.00	6.53- 7.03
10		Fluoranthene	20.000	20.485	-2.4	102	0.01	7.11- 7.61
11		Pyrene	20.000	20.542	-2.7	102	0.00	7.57- 8.07
12	S	P-Terphenyl	20.000	20.964	-4.8	107	0.01	8.22- 8.72
13		Benzo(a)Anthracene	10.000	9.990	0.1	100	0.02	8.78- 9.28
14		Chrysene	10.000	10.047	-0.5	101	0.02	9.09- 9.59
15		Benzo(b)Fluoranthene	10.000	10.076	-0.8	101	0.02	9.99-10.49
16		Benzo(k)Fluoranthene	10.000	10.030	-0.3	101	0.02	10.48-10.98
17		Benzo(a) Pyrene	10.000	10.529	-5.3	105	0.02	10.99-11.49
18		Dibenzo(a,h)anthracene	10.000	10.145	-1.4	101	0.03	11.52-12.52

6025

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP162-CC107
Lab FileID: PP004054.D

19	Benzo(g,h,i) Perylene	10.000	10.325	-3.2	104	0.03	12.19-13.19
20	Indeno(1,2,3-cd)pyrene	10.000	10.117	-1.2	102	0.03	12.66-13.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PP002554.D 8310_32.M Mon Mar 28 13:20:57 2005

0026

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP162-CC107
Lab FileID: PP004062.D

Evaluate Continuing Calibration Report

Signal #1 : P:\HPCHEM\1\DATA\0325PAH\PP004062.D\dad1B.ch Vial: 3
Signal #2 : P:\HPCHEM\1\DATA\0325PAH\PP004062.D\dad1A.ch
Acq On : 25-Mar-2005, 23:21:02 Operator: MIKEE
Sample : CC107-20 Inst : G1315B
Misc : OP12790,gpp162,30.0,,,5,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS1.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8310_32.M (Chemstation Integrator)
Title : PAH's BY EPA 8310
Last Update : Tue Mar 01 14:00:58 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.340	-1.7	100	0.00	3.93- 4.43
2		Acenaphthylene	20.000	20.073	-0.4	101	0.00	4.47- 4.97
3		1-Methyl Naphthalene	20.000	20.288	-1.4	102	0.00	4.83- 5.33
4		2-Methyl Naphthalene	20.000	20.545	-2.7	103	0.00	5.02- 5.52
5		Acenaphthene	20.000	20.397	-2.0	102	0.00	5.24- 5.74
6		Fluorene	20.000	20.455	-2.3	103	0.00	5.40- 5.90
7		Phenanthrene	20.000	20.205	-1.0	102	0.00	5.97- 6.47
8	S	O-Terphenyl	20.000	20.434	-2.2	104	0.00	6.26- 6.76
9		Anthracene	10.000	10.339	-3.4	99	0.00	6.53- 7.03
10		Fluoranthene	20.000	20.498	-2.5	103	0.00	7.11- 7.61
11		Pyrene	20.000	20.637	-3.2	102	0.00	7.57- 8.07
12	S	P-Terphenyl	20.000	21.049	-5.2	107	0.00	8.22- 8.72
13		Benzo(a)Anthracene	10.000	10.054	-0.5	101	0.00	8.78- 9.28
14		Chrysene	10.000	10.171	-1.7	101	0.00	9.09- 9.59
15		Benzo(b)Fluoranthene	10.000	10.136	-1.4	102	0.00	9.99-10.49
16		Benzo(k)Fluoranthene	10.000	9.890	1.1	99	0.00	10.48-10.98
17		Benzo(a) Pyrene	10.000	10.371	-3.7	104	0.00	10.99-11.49
18		Dibenzo(a,h)anthracene	10.000	10.125	-1.3	102	0.00	11.52-12.52
19		Benzo(g,h,i) Perylene	10.000	10.007	-0.1	102	0.00	12.19-13.19
20		Indeno(1,2,3-cd)pyrene	10.000	10.410	-4.1	105	0.01	12.66-13.66

***** Signal #2 *****

1		Naphthalene	20.000	20.355	-1.8	103	0.00	3.93- 4.43
2		Acenaphthylene	20.000	20.057	-0.3	101	0.00	4.47- 4.97
3		1-Methyl Naphthalene	20.000	20.232	-1.2	102	0.00	4.83- 5.33
4		2 Methyl Naphthalene	20.000	20.399	-2.0	102	0.00	5.02- 5.52
5		Acenaphthene	20.000	19.631	1.8	98	0.00	5.24- 5.74
6		Fluorene	20.000	20.386	-1.9	102	0.00	5.40- 5.90
7		Phenanthrene	20.000	20.637	-3.2	102	0.00	5.97- 6.47
8	S	O-Terphenyl	20.000	20.281	-1.4	103	0.00	6.26- 6.76
9		Anthracene	10.000	10.898	-9.0	102	0.00	6.53- 7.03
10		Fluoranthene	20.000	20.284	-1.4	101	0.00	7.11- 7.61
11		Pyrene	20.000	20.465	-2.3	102	0.00	7.57- 8.07
12	S	P-Terphenyl	20.000	21.004	-5.0	107	0.00	8.22- 8.72
13		Benzo(a)Anthracene	10.000	10.043	-0.4	101	0.00	8.78- 9.28
14		Chrysene	10.000	10.101	-1.0	101	0.00	9.09- 9.59
15		Benzo(b)Fluoranthene	10.000	10.139	-1.4	101	0.00	9.99-10.49
16		Benzo(k)Fluoranthene	10.000	10.031	-0.3	101	0.00	10.48-10.98
17		Benzo(a) Pyrene	10.000	10.395	-3.9	104	0.00	10.99-11.49
18		Dibenzo(a,h)anthracene	10.000	10.211	-2.1	101	0.00	11.52-12.52

0027

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP162-CC107
Lab FileID: PP004062.D

19	Benzo(g,h,i) Perylene	10.000	10.303	-3.0	104	0.00	12.19-13.19
20	Indeno(1,2,3-cd)pyrene	10.000	10.286	-2.9	104	0.00	12.66-13.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PP002554.D 8310_32.M Mon Mar 28 13:20:59 2005

0028

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP162-ECC107
Lab FileID: PP004070.D

Evaluate Continuing Calibration Report

Signal #1 : P:\HPCHEM\1\DATA\0325PAH\PP004070.D\dad1B.ch Vial: 3
Signal #2 : P:\HPCHEM\1\DATA\0325PAH\PP004070.D\dad1A.ch
Acq On : 26-Mar-2005, 01:53:58 Operator: MIKEE
Sample : ECC107-20 Inst : G1315B
Misc : OP12790,gpp162,30.0,,,5,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS1.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8310_32.M (Chemstation Integrator)
Title : PAH's BY EPA 8310
Last Update : Tue Mar 01 14:00:58 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.268	-1.3	100	0.00	3.93- 4.43
2		Acenaphthylene	20.000	20.037	-0.2	101	0.00	4.47- 4.97
3		1-Methyl Naphthalene	20.000	20.291	-1.5	102	0.00	4.83- 5.33
4		2-Methyl Naphthalene	20.000	20.579	-2.9	103	0.00	5.02- 5.52
5		Acenaphthene	20.000	20.505	-2.5	103	0.01	5.24- 5.74
6		Fluorene	20.000	20.437	-2.2	102	0.01	5.40- 5.90
7		Phenanthrene	20.000	20.228	-1.1	102	0.01	5.97- 6.47
8	S	O-Terphenyl	20.000	20.423	-2.1	104	0.01	6.26- 6.76
9		Anthracene	10.000	10.388	-3.9	100	0.00	6.53- 7.03
10		Fluoranthene	20.000	20.503	-2.5	103	0.00	7.11- 7.61
11		Pyrene	20.000	20.692	-3.5	103	0.00	7.57- 8.07
12	S	P-Terphenyl	20.000	21.076	-5.4	108	0.00	8.22- 8.72
13		Benzo(a)Anthracene	10.000	10.072	-0.7	101	0.00	8.78- 9.28
14		Chrysene	10.000	10.197	-2.0	101	0.00	9.09- 9.59
15		Benzo(b)Fluoranthene	10.000	10.094	-0.9	101	0.00	9.99-10.49
16		Benzo(k)Fluoranthene	10.000	10.265	-2.7	103	0.00	10.48-10.98
17		Benzo(a) Pyrene	10.000	10.410	-4.1	104	0.00	10.99-11.49
18		Dibenzo(a,h)anthracene	10.000	10.118	-1.2	102	0.00	11.52-12.52
19		Benzo(g,h,i) Perylene	10.000	10.119	-1.2	103	0.00	12.19-13.19
20		Indeno(1,2,3-cd)pyrene	10.000	10.110	-1.1	102	0.00	12.66-13.66

***** Signal #2 *****

1		Naphthalene	20.000	20.291	-1.5	102	0.00	3.93- 4.43
2		Acenaphthylene	20.000	20.022	-0.1	101	0.00	4.47- 4.97
3		1-Methyl Naphthalene	20.000	20.230	-1.2	102	0.00	4.83- 5.33
4		2-Methyl Naphthalene	20.000	20.421	-2.1	102	0.00	5.02- 5.52
5		Acenaphthene	20.000	19.749	1.3	99	0.01	5.24- 5.74
6		Fluorene	20.000	20.367	-1.8	102	0.01	5.40- 5.90
7		Phenanthrene	20.000	20.646	-3.2	102	0.01	5.97- 6.47
8	S	O-Terphenyl	20.000	20.238	-1.2	103	0.01	6.26- 6.76
9		Anthracene	10.000	10.916	-9.2	102	0.01	6.53- 7.03
10		Fluoranthene	20.000	20.292	-1.5	101	0.00	7.11- 7.61
11		Pyrene	20.000	20.531	-2.7	102	0.00	7.57- 8.07
12	S	P-Terphenyl	20.000	21.046	-5.2	107	0.00	8.22- 8.72
13		Benzo(a)Anthracene	10.000	10.041	-0.4	101	0.00	8.78- 9.28
14		Chrysene	10.000	10.108	-1.1	101	0.00	9.09- 9.59
15		Benzo(b)Fluoranthene	10.000	10.120	-1.2	101	0.00	9.99-10.49
16		Benzo(k)Fluoranthene	10.000	10.074	-0.7	101	0.00	10.48-10.98
17		Benzo(a) Pyrene	10.000	10.427	-4.3	104	0.00	10.99-11.49
18		Dibenzo(a,h)anthracene	10.000	10.196	-2.0	101	0.00	11.52-12.52

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP162-ECC107
Lab FileID: PP004070.D

19	Benzo(g,h,i) Perylene	10.000	10.339	-3.4	104	0.00	12.19-13.19
20	Indeno(1,2,3-cd)pyrene	10.000	10.149	-1.5	102	0.00	12.66-13.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PP002554.D 8310_32.M Mon Mar 28 13:21:00 2005

0030

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP163-CC107
Lab FileID: PP004072.D

Evaluate Continuing Calibration Report

Signal #1 : P:\HPCHEM\1\DATA\0328PAH\PP004072.D\dad1B.ch Vial: 2
Signal #2 : P:\HPCHEM\1\DATA\0328PAH\PP004072.D\dad1A.ch
Acq On : 28-Mar-2005, 13:48:20 Operator: MIKEE
Sample : CC107-10 Inst : G1315B
Misc : OP12790,gpp163,30.0,,,5,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS1.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8310_32.M (Chemstation Integrator)
Title : PAH's BY EPA 8310
Last Update : Tue Mar 01 14:00:58 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	10.000	9.915	0.9	99	0.00	3.93- 4.43
2		Acenaphthylene	10.000	9.802	2.0	99	0.00	4.47- 4.97
3		1-Methyl Naphthalene	10.000	9.894	1.1	99	0.00	4.83- 5.33
4		2-Methyl Naphthalene	10.000	10.057	-0.6	100	0.00	5.02- 5.52
5		Acenaphthene	10.000	9.994	0.1	99	0.00	5.24- 5.74
6		Fluorene	10.000	10.046	-0.5	100	0.00	5.40- 5.90
7		Phenanthrene	10.000	9.951	0.5	99	0.00	5.97- 6.47
8	S	O-Terphenyl	10.000	10.063	-0.6	101	0.00	6.26- 6.76
9		Anthracene	5.000	5.377	-7.5	97	0.00	6.53- 7.03
10		Fluoranthene	10.000	10.242	-2.4	102	0.00	7.11- 7.61
11		Pyrene	10.000	10.244	-2.4	100	0.00	7.57- 8.07
12	S	P-Terphenyl	10.000	10.354	-3.5	105	0.00	8.22- 8.72
13		Benzo(a)Anthracene	5.000	4.948	1.0	99	0.00	8.78- 9.28
14		Chrysene	5.000	5.047	-0.9	99	0.00	9.09- 9.59
15		Benzo(b)Fluoranthene	5.000	4.933	1.3	99	0.00	9.99-10.49
16		Benzo(k)Fluoranthene	5.000	5.027	-0.5	103	0.00	10.48-10.98
17		Benzo(a) Pyrene	5.000	5.160	-3.2	103	0.00	10.99-11.49
18		Dibenzo(a,h)anthracene	5.000	4.935	1.3	99	0.00	11.52-12.52
19		Benzo(g,h,i) Perylene	5.000	4.965	0.7	101	0.00	12.19-13.19
20		Indeno(1,2,3-cd)pyrene	5.000	4.897	2.1	99	0.00	12.66-13.66

***** Signal #2 *****

1		Naphthalene	10.000	9.959	0.4	101	0.00	3.93- 4.43
2		Acenaphthylene	10.000	9.850	1.5	99	0.00	4.47- 4.97
3		1-Methyl Naphthalene	10.000	9.857	1.4	98	0.00	4.83- 5.33
4		2-Methyl Naphthalene	10.000	9.922	0.8	99	0.00	5.02- 5.52
5		Acenaphthene	10.000	9.506	4.9	97	0.00	5.24- 5.74
6		Fluorene	10.000	9.958	0.4	99	0.00	5.40- 5.90
7		Phenanthrene	10.000	10.180	-1.8	99	0.00	5.97- 6.47
8	S	O-Terphenyl	10.000	9.915	0.9	101	0.00	6.26- 6.76
9		Anthracene	5.000	5.548	-11.0	101	0.00	6.53- 7.03
10		Fluoranthene	10.000	10.178	-1.8	102	0.00	7.11- 7.61
11		Pyrene	10.000	10.104	-1.0	101	0.00	7.57- 8.07
12	S	P-Terphenyl	10.000	10.341	-3.4	105	0.00	8.22- 8.72
13		Benzo(a)Anthracene	5.000	4.931	1.4	99	0.00	8.78- 9.28
14		Chrysene	5.000	4.968	0.6	99	0.00	9.09- 9.59
15		Benzo(b)Fluoranthene	5.000	4.968	0.6	99	0.00	9.99-10.49
16		Benzo(k)Fluoranthene	5.000	4.937	1.3	99	0.00	10.48-10.98
17		Benzo(a) Pyrene	5.000	5.181	-3.6	104	0.00	10.99-11.49
18		Dibenzo(a,h)anthracene	5.000	5.018	-0.4	99	0.00	11.52-12.52

C031

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP163-CC107
Lab FileID: PP004072.D

19	Benzo(g,h,i) Perylene	5.000	5.083	-1.7	102	0.00	12.19-13.19
20	Indeno(1,2,3-cd)pyrene	5.000	4.926	1.5	99	0.00	12.66-13.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PP002553.D 8310_32.M Tue Mar 29 14:57:21 2005

0032

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP163-CC107
Lab FileID: PP004082.D

Evaluate Continuing Calibration Report

Signal #1 : P:\HPCHEM\1\DATA\0328PAH\PP004082.D\dad1B.ch Vial: 3
Signal #2 : P:\HPCHEM\1\DATA\0328PAH\PP004082.D\dad1A.ch
Acq On : 28-Mar-2005, 16:59:22 Operator: MIKEE
Sample : CC107-20 Inst : G1315B
Misc : OP12754,gpp163,1000,,,1,,water Multiplr: 1.00
IntFile Signal #1: EVENTS1.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8310_32.M (Chemstation Integrator)
Title : PAH's BY EPA 8310
Last Update : Tue Mar 01 14:00:58 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.750	1.3	97	0.00	3.93- 4.43
2		Acenaphthylene	20.000	19.588	2.1	99	0.00	4.47- 4.97
3		1-Methyl Naphthalene	20.000	19.780	1.1	100	0.00	4.83- 5.33
4		2-Methyl Naphthalene	20.000	20.092	-0.5	100	0.00	5.02- 5.52
5		Acenaphthene	20.000	20.094	-0.5	100	0.00	5.24- 5.74
6		Fluorene	20.000	20.012	-0.1	100	0.00	5.40- 5.90
7		Phenanthrene	20.000	19.810	1.0	100	0.00	5.97- 6.47
8	S	O-Terphenyl	20.000	20.017	-0.1	102	0.00	6.26- 6.76
9		Anthracene	10.000	10.177	-1.8	98	0.00	6.53- 7.03
10		Fluoranthene	20.000	20.049	-0.2	100	0.00	7.11- 7.61
11		Pyrene	20.000	20.220	-1.1	100	0.00	7.57- 8.07
12	S	P-Terphenyl	20.000	20.658	-3.3	105	0.00	8.22- 8.72
13		Benzo(a)Anthracene	10.000	9.860	1.4	99	0.00	8.78- 9.28
14		Chrysene	10.000	9.982	0.2	99	0.00	9.09- 9.59
15		Benzo(b)Fluoranthene	10.000	9.880	1.2	99	0.00	9.99-10.49
16		Benzo(k)Fluoranthene	10.000	10.185	-1.9	102	0.00	10.48-10.98
17		Benzo(a) Pyrene	10.000	10.356	-3.6	104	0.00	10.99-11.49
18		Dibenzo(a,h)anthracene	10.000	9.880	1.2	99	0.00	11.52-12.52
19		Benzo(g,h,i) Perylene	10.000	9.897	1.0	101	0.00	12.19-13.19
20		Indeno(1,2,3-cd)pyrene	10.000	9.966	0.3	100	0.00	12.66-13.66

***** Signal #2 *****

1		Naphthalene	20.000	19.810	1.0	100	0.00	3.93- 4.43
2		Acenaphthylene	20.000	19.588	2.1	99	0.00	4.47- 4.97
3		1-Methyl Naphthalene	20.000	19.630	1.9	99	0.00	4.83- 5.33
4		2-Methyl Naphthalene	20.000	19.756	1.2	99	0.00	5.02- 5.52
5		Acenaphthene	20.000	19.010	4.9	95	0.00	5.24- 5.74
6		Fluorene	20.000	19.829	0.9	99	0.00	5.40- 5.90
7		Phenanthrene	20.000	20.165	-0.8	99	0.00	5.97- 6.47
8	S	O-Terphenyl	20.000	19.701	1.5	100	0.00	6.26- 6.76
9		Anthracene	10.000	10.724	-7.2	100	0.00	6.53- 7.03
10		Fluoranthene	20.000	20.289	-1.4	101	0.00	7.11- 7.61
11		Pyrene	20.000	20.060	-0.3	100	0.00	7.57- 8.07
12	S	P-Terphenyl	20.000	20.617	-3.1	105	0.00	8.22- 8.72
13		Benzo(a)Anthracene	10.000	9.827	1.7	99	0.00	8.78- 9.28
14		Chrysene	10.000	9.875	1.3	99	0.00	9.09- 9.59
15		Benzo(b)Fluoranthene	10.000	9.881	1.2	99	0.00	9.99-10.49
16		Benzo(k)Fluoranthene	10.000	9.836	1.6	99	0.00	10.48-10.98
17		Benzo(a) Pyrene	10.000	10.354	-3.5	104	0.00	10.99-11.49
18		Dibenzo(a,h)anthracene	10.000	9.962	0.4	99	0.00	11.52-12.52

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GPP163-CC107
Lab FileID: PP004082.D

19	Benzo(g,h,i) Perylene	10.000	10.142	-1.4	102	0.00	12.19-13.19
20	Indeno(1,2,3-cd)pyrene	10.000	9.926	0.7	100	0.00	12.66-13.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PP002554.D 8310_32.M Tue Mar 29 14:57:44 2005

0034

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB006-01		
Lab Sample ID:	F30558-1	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	86.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP48296.D	1	03/28/05	SM	03/24/05	OP12789	GOP1417
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	11.6	9.5	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		59-121%

0035

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB001-01		
Lab Sample ID:	F30558-2	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22607.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	13.5	9.3	6.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		59-121%

0036

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB002-01		
Lab Sample ID:	F30558-3	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	93.8
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22608.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	18.8	8.8	6.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		59-121%

0037

U = Not detected MDL - Method Detection Limit I = Result >= MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB-DU02		
Lab Sample ID:	F30558-4	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22609.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	10.5	9.1	6.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	108%		59-121%

0038

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Method Blank Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12789-MB	IJ22592.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F30558-1, F30558-2, F30558-3, F30558-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	8.3	5.7	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	83%	59-121%

0039

Method Blank Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12789-MB	OP48294.D	1	03/28/05	SM	03/24/05	OP12789	GOP1417

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F30558-1, F30558-2, F30558-3, F30558-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	ND	8.3	5.7	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	91%	59-121%

0040

Blank Spike Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12789-BS	IJ22591.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F30558-1, F30558-2, F30558-3, F30558-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C8-C40)	28.3	24.0	85	70-115

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	88%	59-121%

0041

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12789-MS	OP48297.D	1	03/28/05	SM	03/24/05	OP12789	GOP1417
OP12789-MSD	OP48298.D	1	03/28/05	SM	03/24/05	OP12789	GOP1417
F30558-1	OP48296.D	1	03/28/05	SM	03/24/05	OP12789	GOP1417

The QC reported here applies to the following samples: **Method:** FLORIDA-PRO

F30558-1, F30558-2, F30558-3, F30558-4

CAS No.	Compound	F30558-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C8-C40)	11.6		32.4	39.4	86	46.2	108	16	42-131/28

CAS No.	Surrogate Recoveries	MS	MSD	F30558-1	Limits
84-15-1	o-Terphenyl	94%	91%	96%	59-121%

0042

Semivolatile Surrogate Recovery Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Method: FLORIDA-PRO **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F30558-1	OP48296.D	96.0
F30558-2	IJ22607.D	102.0
F30558-3	IJ22608.D	101.0
F30558-4	IJ22609.D	108.0
OP12789-BS	IJ22591.D	88.0
OP12789-MB	IJ22592.D	83.0
OP12789-MB	OP48294.D	91.0
OP12789-MS	OP48297.D	94.0
OP12789-MSD	OP48298.D	91.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	59-121%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Check Std:	GIJ1112-CC1107	**Injection Date:**	03/26/05
Lab File ID:	IJ22590.D	**Injection Time:**	01:40
Instrument ID:	GCIJ	**Method:**	FLORIDA-PRO

	S1 [a] RT
Check Std	5.54

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP12789-BS	IJ22591.D	03/26/05	02:03	5.54
OP12789-MB	IJ22592.D	03/26/05	02:25	5.54
ZZZZZZ	IJ22593.D	03/26/05	02:47	5.53
ZZZZZZ	IJ22594.D	03/26/05	03:09	5.54
ZZZZZZ	IJ22595.D	03/26/05	03:32	5.53
ZZZZZZ	IJ22596.D	03/26/05	03:54	5.53
ZZZZZZ	IJ22598.D	03/26/05	04:38	5.54
ZZZZZZ	IJ22599.D	03/26/05	05:00	5.53
ZZZZZZ	IJ22600.D	03/26/05	05:23	5.53

Surrogate Compounds

S1 = o-Terphenyl

(a) Retention time from GC signal #1

0044

GC Surrogate Retention Time Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Check Std:	GIJ1112-CC1107	**Injection Date:**	03/26/05
Lab File ID:	IJ22601.D	**Injection Time:**	05:45
Instrument ID:	GCIJ	**Method:**	FLORIDA-PRO

	S1 [a] RT
Check Std	5.54

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
ZZZZZZ	IJ22602.D	03/26/05	06:07	5.54
ZZZZZZ	IJ22603.D	03/26/05	06:29	5.53
F30558-2	IJ22607.D	03/26/05	07:58	5.53
F30558-3	IJ22608.D	03/26/05	08:21	5.54
F30558-4	IJ22609.D	03/26/05	08:43	5.53
GIJ1112-ECC1107	IJ22610.D	03/26/05	09:04	5.53

Surrogate Compounds

S1 = o-Terphenyl

(a) Retention time from GC signal #1

0045

GC Surrogate Retention Time Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Check Std:	GOP1417-CC1383	**Injection Date:**	03/28/05
Lab File ID:	OP48289.D	**Injection Time:**	15:04
Instrument ID:	GCOP	**Method:**	FLORIDA-PRO

	S1 [a] RT
Check Std	5.03

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
ZZZZZZ	OP48293.D	03/28/05	16:28	5.03
OP12789-MB	OP48294.D	03/28/05	16:49	5.03
ZZZZZZ	OP48295.D	03/28/05	17:10	5.03
F30558-1	OP48296.D	03/28/05	17:31	5.03
OP12789-MS	OP48297.D	03/28/05	17:52	5.03
OP12789-MSD	OP48298.D	03/28/05	18:13	5.03
GOP1417-ECC1380	OP48299.D	03/28/05	18:34	5.03

Surrogate Compounds

S1 = o-Terphenyl

(a) Retention time from GC signal #1

0046

Initial Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GIJ1107-ICC1107
Lab FileID: IJ22462.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title : TPH by FL_PRO
Last Update : Fri Mar 18 13:10:37 2005
Response via : Initial Calibration

Calibration Files
1 =IJ22460.D 2 =IJ22461.D 3 =IJ22462.D 4 =IJ22463.D
5 =IJ22464.D 6 =IJ22465.D 7 =IJ22466.D icv =IJ22467.D

Compound	1	2	3	4	5	6	7	icv	Avg	%RSD
1) O-TERPHENYL	1.405	1.395	1.450	1.463	1.409				1.424 E4	2.12
2) TPH (C8-C40)	1.417	1.367	1.410	1.414	1.356	1.306	1.294		1.366 E4	3.74

(#) = Out of Range ### Number of calibration levels exceeded format ###

FL_PRO_F.M Sat Mar 19 11:24:13 2005

0047

Initial Calibration Verification

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GIJ1107-ICV1107
Lab FileID: IJ22467.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\0318PRO\IJ22467.D
Acq On : 18 Mar 2005 12:49 pm
Sample : icv1107-850
Misc : op12726,gij1107,30.0,,,1,1,soil
IntFile : events.e

Vial: 9
Operator: sarahm
Inst : FID 1
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title : TPH by FL_PRO
Last Update : Fri Mar 18 13:10:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	O-TERPHENYL		----------NA----------				
2 H	TPH (C8-C40)	850.000	913.656	-7.5	0	0.00	2.47-11.59

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ22467.D FL_PRO_F.M Sat Mar 19 11:51:34 2005

0048

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GIJ1112-CC1107
Lab FileID: IJ22590.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\0325PRO\IJ22590.D
Acq On : 26 Mar 2005 1:40 am
Sample : cc1107-1020
Misc : op12795,gij1112,1010,,,1,1,water
IntFile : events.e

Vial: 1
Operator: sarahm
Inst : FID 1
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title : TPH by FL_PRO
Last Update : Fri Mar 25 15:08:45 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	O-TERPHENYL	60.000	58.677	2.2	96	0.00	5.43- 5.63
2 H	TPH (C8-C40)	1020.000	1043.522	-2.3	99	0.00	2.44-11.51

(#) = Out of Range
SPCC's out = 0 CCC's out = 0
IJ22462.D FL_PRO_F.M Mon Mar 28 08:03:59 2005

0049

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GIJ1112-CC1107
Lab FileID: IJ22601.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\0325PRO\IJ22601.D
Acq On : 26 Mar 2005 5:45 am
Sample : cc1107-1020
Misc : op12789,gij1112,30.6,,,1,1,soil
IntFile : events.e

Vial: 1
Operator: sarahm
Inst : FID 1
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title : TPH by FL_PRO
Last Update : Fri Mar 25 15:08:45 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	O-TERPHENYL	60.000	74.280	-23.8	122	0.00	5.43- 5.63
2 H	TPH (C8-C40)	1020.000	1263.171	-23.8	120	0.00	2.44-11.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ22462.D FL_PRO_F.M Mon Mar 28 08:03:59 2005

0050

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GIJ1112-ECC1107
Lab FileID: IJ22610.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\0325PRO\IJ22610.D Vial: 1
Acq On : 26 Mar 2005 9:04 am Operator: sarahm
Sample : ecc1107-1020 Inst : FID 1
Misc : op12789,gij1112,30.6,,,1,1,soil Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\1\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title : TPH by FL_PRO
Last Update : Fri Mar 25 15:08:45 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	O-TERPHENYL	60.000	75.410	-25.7#	123	0.00	5.43- 5.63
2 H	TPH (C8-C40)	1020.000	1263.342	-23.9	120	0.00	2.44-11.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ22462.D FL_PRO_F.M Mon Mar 28 08:04:00 2005

0051

Initial Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GOP1383-ICC1383
Lab FileID: OP46584.D

Response Factor Report FID 2

Method : C:\HPCHEM\2\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title : TPH by FL_PRO
Last Update : Tue Feb 01 13:57:46 2005
Response via : Initial Calibration

Calibration Files
1 =OP46585.D 2 =OP46586.D 3 =OP46584.D 4 =OP46587.D
5 =OP46588.D 6 =OP46589.D 7 =OP46590.D ICV =OP46432.D

Compound	1	2	3	4	5	6	7	ICV	Avg	%RSD
1) O-TERPHENYL	2.024	2.015	1.979	2.399	2.122				2.108 E4	8.11
2) TPH (C8-C40)	2.006	1.928	1.889	2.233	1.974	1.821	1.688		1.934 E4	8.74

(#) = Out of Range ### Number of calibration levels exceeded format ###

FL_PRO_F.M Wed Feb 02 07:10:54 2005

0052

Initial Calibration Verification

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GOP1383-ICV1383
Lab FileID: OP46591.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\0201PRO\OP46591.D          Vial: 8
Acq On    :  1 Feb 2005   1:39 pm                    Operator: sarahm
Sample    : icv1383-850                              Inst    : FID 2
Misc      : op12390,gop1383,1000,,,1,1,water         Multiplr: 1.00
IntFile   : events.e

Method       : C:\HPCHEM\2\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title        : TPH by FL_PRO
Last Update  : Tue Feb 01 13:57:46 2005
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  25%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	O-TERPHENYL		----------NA----------				
2 H	TPH (C8-C40)	850.000	882.109	-3.8	0	0.00	1.97-10.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OP46432.D FL_PRO_F.M Wed Feb 02 07:09:53 2005

0053

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO 248

Sample: GOP1417-CC1383
Lab FileID: OP48289.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\0328PRO\OP48289.D Vial: 1
Acq On : 28 Mar 2005 3:04 pm Operator: sarahm
Sample : cc1383-1020 Inst : FID 2
Misc : op12795,gop1417,1050,,,1,40,water Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title : TPH by FL_PRO
Last Update : Fri Mar 25 12:39:14 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	S	O-TERPHENYL	60.000	61.454	-2.4	109	0.00	4.93- 5.13
2	H	TPH (C8-C40)	1020.000	1044.457	-2.4	105	0.00	1.49- 9.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OP46584.D FL_PRO_F.M Tue Mar 29 08:23:20 2005

0054

Continuing Calibration Summary

Job Number: F30558
Account: TETRPAPT Tetra Tech NUS
Project: NAS Cecil Field-CTO-248

Sample: GOP1417-ECC1383
Lab FileID: OP48299.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\0328PRO\OP48299.D
Acq On : 28 Mar 2005 6:34 pm
Sample : ecc1383-1020
Misc : op12789,gop1417,30.6,,,1,1,soil
IntFile : events.e

Vial: 1
Operator: sarahm
Inst : FID 2
Multiplr: 1.00

Method : C:\HPCHEM\2\METHODS\FL_PRO_F.M (Chemstation Integrator)
Title : TPH by FL_PRO
Last Update : Fri Mar 25 12:39:14 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1 S	O-TERPHENYL	60.000	64.255	-7.1	114	0.00	4.93- 5.13
2 H	TPH (C8-C40)	1020.000	1070.149	-4.9	107	0.00	1.49- 9.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OP46584.D FL_PRO_F.M Tue Mar 29 08:23:20 2005

0055

Accutest Laboratories

Sample Summary

Tetra Tech NUS

Job No: F30558

NAS Cecil Field-CTO-248
Project No: N4242-WR#1001712/ Tank 290A

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F30558-1	03/22/05	11:25 MD	03/23/05	SO	Soil	CEF-B290A-SB006-01
F30558-1D	03/22/05	11:25 MD	03/23/05	SO	Soil Dup/MSD	CEF-B290A-SB006-01
F30558-1S	03/22/05	11:25 MD	03/23/05	SO	Soil Matrix Spike	CEF-B290A-SB006-01
F30558-2	03/22/05	11:40 MD	03/23/05	SO	Soil	CEF-B290A-SB001-01
F30558-3	03/22/05	11:53 MD	03/23/05	SO	Soil	CEF-B290A-SB002-01
F30558-4	03/22/05	00:00 MD	03/23/05	SO	Soil	CEF-B290A-SB-DU02

0057

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories

Sample Summary

Tetra Tech NUS

Job No: F30558

NAS Cecil Field-CTO-248
Project No: N4242-WR#1001712/ Tank 290A

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F30558-1	03/22/05	11:25 MD	03/23/05	SO	Soil	CEF-B290A-SB006-01
F30558-1D	03/22/05	11:25 MD	03/23/05	SO	Soil Dup/MSD	CEF-B290A-SB006-01
F30558-1S	03/22/05	11:25 MD	03/23/05	SO	Soil Matrix Spike	CEF-B290A-SB006-01
F30558-2	03/22/05	11:40 MD	03/23/05	SO	Soil	CEF-B290A-SB001-01
F30558-3	03/22/05	11:53 MD	03/23/05	SO	Soil	CEF-B290A-SB002-01
F30558-4	03/22/05	00:00 MD	03/23/05	SO	Soil	CEF-B290A-SB-DU02

0058

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB006-01		
Lab Sample ID:	F30558-1	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	86.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004064.D	1	03/25/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	190 U	760	190	ug/kg	
208-96-8	Acenaphthylene	190 U	760	190	ug/kg	
120-12-7	Anthracene	190 U	380	190	ug/kg	
56-55-3	Benzo(a)anthracene	95 U	380	95	ug/kg	
50-32-8	Benzo(a)pyrene	19 U	76	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	19 U	76	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	19 U	76	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	19 U	76	19	ug/kg	
218-01-9	Chrysene	95 U	380	95	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	19 U	76	19	ug/kg	
206-44-0	Fluoranthene	95 U	380	95	ug/kg	
86-73-7	Fluorene	190 U	380	190	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	19 U	76	19	ug/kg	
91-20-3	Naphthalene	95 U	380	95	ug/kg	
90-12-0	1-Methylnaphthalene	95 U	380	95	ug/kg	
91-57-6	2-Methylnaphthalene	95 U	380	95	ug/kg	
85-01-8	Phenanthrene	190 U	380	190	ug/kg	
129-00-0	Pyrene	95 U	380	95	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	53%		49-124%
92-94-4	p-Terphenyl	57%		56-141%

0059

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB001-01		
Lab Sample ID:	F30558-2	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004067.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	190 U	750	190	ug/kg	
208-96-8	Acenaphthylene	190 U	750	190	ug/kg	
120-12-7	Anthracene	190 U	370	190	ug/kg	
56-55-3	Benzo(a)anthracene	93 U	370	93	ug/kg	
50-32-8	Benzo(a)pyrene	19 U	75	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	19 U	75	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	19 U	75	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	19 U	75	19	ug/kg	
218-01-9	Chrysene	93 U	370	93	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	19 U	75	19	ug/kg	
206-44-0	Fluoranthene	93 U	370	93	ug/kg	
86-73-7	Fluorene	190 U	370	190	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	19 U	75	19	ug/kg	
91-20-3	Naphthalene	93 U	370	93	ug/kg	
90-12-0	1-Methylnaphthalene	93 U	370	93	ug/kg	
91-57-6	2-Methylnaphthalene	93 U	370	93	ug/kg	
85-01-8	Phenanthrene	190 U	370	190	ug/kg	
129-00-0	Pyrene	93 U	370	93	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		49-124%
92-94-4	p-Terphenyl	91%		56-141%

0060

U = Not detected MDL - Method Detection Limit I = Result >= MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB002-01		
Lab Sample ID:	F30558-3	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	93.8
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004068.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	180 U	710	180	ug/kg	
208-96-8	Acenaphthylene	180 U	710	180	ug/kg	
120-12-7	Anthracene	180 U	350	180	ug/kg	
56-55-3	Benzo(a)anthracene	88 U	350	88	ug/kg	
50-32-8	Benzo(a)pyrene	18 U	71	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	18 U	71	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	18 U	71	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	18 U	71	18	ug/kg	
218-01-9	Chrysene	88 U	350	88	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18 U	71	18	ug/kg	
206-44-0	Fluoranthene	88 U	350	88	ug/kg	
86-73-7	Fluorene	180 U	350	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	18 U	71	18	ug/kg	
91-20-3	Naphthalene	88 U	350	88	ug/kg	
90-12-0	1-Methylnaphthalene	88 U	350	88	ug/kg	
91-57-6	2-Methylnaphthalene	88 U	350	88	ug/kg	
85-01-8	Phenanthrene	180 U	350	180	ug/kg	
129-00-0	Pyrene	88 U	350	88	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		49-124%
92-94-4	p-Terphenyl	87%		56-141%

0061

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB-DU02		
Lab Sample ID:	F30558-4	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	89.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004069.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	180 U	730	180	ug/kg	
208-96-8	Acenaphthylene	180 U	730	180	ug/kg	
120-12-7	Anthracene	180 U	370	180	ug/kg	
56-55-3	Benzo(a)anthracene	92 U	370	92	ug/kg	
50-32-8	Benzo(a)pyrene	18 U	73	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	18 U	73	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	18 U	73	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	18 U	73	18	ug/kg	
218-01-9	Chrysene	92 U	370	92	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18 U	73	18	ug/kg	
206-44-0	Fluoranthene	92 U	370	92	ug/kg	
86-73-7	Fluorene	180 U	370	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	18 U	73	18	ug/kg	
91-20-3	Naphthalene	92 U	370	92	ug/kg	
90-12-0	1-Methylnaphthalene	92 U	370	92	ug/kg	
91-57-6	2-Methylnaphthalene	92 U	370	92	ug/kg	
85-01-8	Phenanthrene	180 U	370	180	ug/kg	
129-00-0	Pyrene	92 U	370	92	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		49-124%
92-94-4	p-Terphenyl	92%		56-141%

0062

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB006-01		
Lab Sample ID:	F30558-1	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	86.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP48296.D	1	03/28/05	SM	03/24/05	OP12789	GOP1417
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	O
	TPH (C8-C40)	11.6	9.5	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		59-121%

0063

U = Not detected MDL - Method Detection Limit I = Result >= MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB001-01		
Lab Sample ID:	F30558-2	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22607.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	13.5	9.3	6.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		59-121%

0064

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB002-01		
Lab Sample ID:	F30558-3	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	93.8
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22608.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	18.8	8.8	6.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		59-121%

0065

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB-DU02		
Lab Sample ID:	F30558-4	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22609.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	10.5	9.1	6.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	108%		59-121%

0066

U = Not detected MDL - Method Detection Limit I = Result >= MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

PROJ_NO: 4248

SDG: F30558 MEDIA: SOIL DATA FRACTION: FAH

nsample	CEF-B290A-SB001-01	nsample	CEF-B290A-SB002-01	nsample	CEF-B290A-SB006-01
samp_date	3/22/2005	samp_date	3/22/2005	samp_date	3/22/2005
lab_id	F30558-2	lab_id	F30558-3	lab_id	F30558-1
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/KG	units	UG/KG	units	UG/KG
Pct_Solids	89.1	Pct_Solids	93.8	Pct_Solids	86.5
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	93	U	U	
2-METHYLNAPHTHALENE	93	U	U	
ACENAPHTHENE	190	U	U	
ACENAPHTHYLENE	190	U	U	
ANTHRACENE	190	U	U	
BENZO(A)ANTHRACENE	93	U	U	
BENZO(A)PYRENE	19	U	U	
BENZO(B)FLUORANTHENE	19	U	U	
BENZO(G,H,I)PERYLENE	19	U	U	
BENZO(K)FLUORANTHENE	19	U	U	
CHRYSENE	93	U	U	
DIBENZO(A,H)ANTHRACENE	19	U	U	
FLUORANTHENE	93	U	U	
FLUORENE	190	U	U	
INDENO(1,2,3-CD)PYRENE	19	U	U	
NAPHTHALENE	93	U	U	
PHENANTHRENE	190	U	U	
PYRENE	93	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	88	U	U	
2-METHYLNAPHTHALENE	88	U	U	
ACENAPHTHENE	180	U	U	
ACENAPHTHYLENE	180	U	U	
ANTHRACENE	180	U	U	
BENZO(A)ANTHRACENE	88	U	U	
BENZO(A)PYRENE	18	U	U	
BENZO(B)FLUORANTHENE	18	U	U	
BENZO(G,H,I)PERYLENE	18	U	U	
BENZO(K)FLUORANTHENE	18	U	U	
CHRYSENE	88	U	U	
DIBENZO(A,H)ANTHRACENE	18	U	U	
FLUORANTHENE	88	U	U	
FLUORENE	180	U	U	
INDENO(1,2,3-CD)PYRENE	18	U	U	
NAPHTHALENE	88	U	U	
PHENANTHRENE	180	U	U	
PYRENE	88	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	95	U	U	
2-METHYLNAPHTHALENE	95	U	U	
ACENAPHTHENE	190	U	U	
ACENAPHTHYLENE	190	U	U	
ANTHRACENE	190	U	U	
BENZO(A)ANTHRACENE	95	U	U	
BENZO(A)PYRENE	19	U	U	
BENZO(B)FLUORANTHENE	19	U	U	
BENZO(G,H,I)PERYLENE	19	U	U	
BENZO(K)FLUORANTHENE	19	U	U	
CHRYSENE	95	U	U	
DIBENZO(A,H)ANTHRACENE	19	U	U	
FLUORANTHENE	95	U	U	
FLUORENE	190	U	U	
INDENO(1,2,3-CD)PYRENE	19	U	U	
NAPHTHALENE	95	U	U	
PHENANTHRENE	190	U	U	
PYRENE	95	U	U	

PROJ_NO: 4248

SDG: F30558 MEDIA: SOIL DATA FRACTION: PAH

nsample	CEF-B290A-SB-DU02
samp_date	3/22/2005
lab_id	F30558-4
qc_type	NM
units	UG/KG
Pct_Solids	89.5
DUP_CF:	CEF-B290A-SB001-01

Parameter	Result	Lab Qual	Val Qual	Qual Code
1-METHYLNAPHTHALENE	92	U	U	
2-METHYLNAPHTHALENE	92	U	U	
ACENAPHTHENE	180	U	U	
ACENAPHTHYLENE	180	U	U	
ANTHRACENE	180	U	U	
BENZO(A)ANTHRACENE	92	U	U	
BENZO(A)PYRENE	18	U	U	
BENZO(B)FLUORANTHENE	18	U	U	
BENZO(G,H,I)PERYLENE	18	U	U	
BENZO(K)FLUORANTHENE	18	U	U	
CHRYSENE	92	U	U	
DIBENZO(A,H)ANTHRACENE	18	U	U	
FLUORANTHENE	92	U	U	
FLUORENE	180	U	U	
INDENO(1,2,3-CD)PYRENE	18	U	U	
NAPHTHALENE	92	U	U	
PHENANTHRENE	180	U	U	
PYRENE	92	U	U	

PROJ_NO: 4248

SDG: F30558 MEDIA: SOIL DATA FRACTION: PET

nsample	CEF-B290A-SB001-01
samp_date	3/22/2005
lab_id	F30558-2
qc_type	NM
units	MG/KG
Pct_Solids	89.1
DUP_CF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	13.5			

nsample	CEF-B290A-SB002-01
samp_date	3/22/2005
lab_id	F30558-3
qc_type	NM
units	MG/KG
Pct_Solids	93.8
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	18.8			

nsample	CEF-B290A-SB006-01
samp_date	3/22/2005
lab_id	F30558-1
qc_type	NM
units	MG/KG
Pct_Solids	86.5
DUP_OF:	

Parameter	Result	Lab Qual	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	11.6			

PROJ_NO: 4248

SDG: F30558 MEDIA: SOIL DATA FRACTION: PET

nsample	CEF-B290A-SB-DU02
samp_date	3/22/2005
lab_id	F30558-4
qc_type	NM
units	MG/KG
Pct_Solids	89.5
DUP_OF:	CEF-B290A-SB001-01

Parameter	Result	Lab Qual	Val Qual	Qual Code
TOTAL PETROLEUM HYDROCARBONS	10.5			

PROJ_NO: 4248

SDG: F30558 MEDIA: SOIL DATA FRACTION: MISC

nsample	CEF-B290A-SB001-01
samp_date	3/22/2005
lab_id	F30558-2
qc_type	NM
Pct_Solids	89.1
DUP_OF:	

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
PERCENT SOLIDS	%	89.1			

nsample	CEF-B290A-SB002-01
samp_date	3/22/2005
lab_id	F30558-3
qc_type	NM
Pct_Solids	93.8
DUP_OF:	

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
PERCENT SOLIDS	%	93.8			

nsample	CEF-B290A-SB006-01
samp_date	3/22/2005
lab_id	F30558-1
qc_type	NM
Pct_Solids	86.5
DUP_OF:	

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
PERCENT SOLIDS	%	86.5			

PROJ_NO: 4248

SDG: F30558 MEDIA: SOIL DATA FRACTION: MISC

nsample	CEF-B290A-SB-DU02
samp_date	3/22/2005
lab_id	F30558-4
qc_type	NM
Pct_Solids	89.5
DUP_OF:	CEF-B290A-SB001-01

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
PERCENT SOLIDS	%	89.5			

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB001-01		
Lab Sample ID:	F30558-2	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004067.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	190 U	750	190	ug/kg	
208-96-8	Acenaphthylene	190 U	750	190	ug/kg	
120-12-7	Anthracene	190 U	370	190	ug/kg	
56-55-3	Benzo(a)anthracene	93 U	370	93	ug/kg	
50-32-8	Benzo(a)pyrene	19 U	75	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	19 U	75	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	19 U	75	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	19 U	75	19	ug/kg	
218-01-9	Chrysene	93 U	370	93	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	19 U	75	19	ug/kg	
206-44-0	Fluoranthene	93 U	370	93	ug/kg	
86-73-7	Fluorene	190 U	370	190	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	19 U	75	19	ug/kg	
91-20-3	Naphthalene	93 U	370	93	ug/kg	
90-12-0	1-Methylnaphthalene	93 U	370	93	ug/kg	
91-57-6	2-Methylnaphthalene	93 U	370	93	ug/kg	
85-01-8	Phenanthrene	190 U	370	190	ug/kg	
129-00-0	Pyrene	93 U	370	93	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		49-124%
92-94-4	p-Terphenyl	91%		56-141%

0011

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB002-01		
Lab Sample ID:	F30558-3	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	93.8
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004068.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	180 U	710	180	ug/kg	
208-96-8	Acenaphthylene	180 U	710	180	ug/kg	
120-12-7	Anthracene	180 U	350	180	ug/kg	
56-55-3	Benzo(a)anthracene	88 U	350	88	ug/kg	
50-32-8	Benzo(a)pyrene	18 U	71	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	18 U	71	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	18 U	71	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	18 U	71	18	ug/kg	
218-01-9	Chrysene	88 U	350	88	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18 U	71	18	ug/kg	
206-44-0	Fluoranthene	88 U	350	88	ug/kg	
86-73-7	Fluorene	180 U	350	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	18 U	71	18	ug/kg	
91-20-3	Naphthalene	88 U	350	88	ug/kg	
90-12-0	1-Methylnaphthalene	88 U	350	88	ug/kg	
91-57-6	2-Methylnaphthalene	88 U	350	88	ug/kg	
85-01-8	Phenanthrene	180 U	350	180	ug/kg	
129-00-0	Pyrene	88 U	350	88	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		49-124%
92-94-4	p-Terphenyl	87%		56-141%

0012

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB006-01		
Lab Sample ID:	F30558-1	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	86.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004064.D	1	03/25/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	190 U	760	190	ug/kg	
208-96-8	Acenaphthylene	190 U	760	190	ug/kg	
120-12-7	Anthracene	190 U	380	190	ug/kg	
56-55-3	Benzo(a)anthracene	95 U	380	95	ug/kg	
50-32-8	Benzo(a)pyrene	19 U	76	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	19 U	76	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	19 U	76	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	19 U	76	19	ug/kg	
218-01-9	Chrysene	95 U	380	95	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	19 U	76	19	ug/kg	
206-44-0	Fluoranthene	95 U	380	95	ug/kg	
86-73-7	Fluorene	190 U	380	190	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	19 U	76	19	ug/kg	
91-20-3	Naphthalene	95 U	380	95	ug/kg	
90-12-0	1-Methylnaphthalene	95 U	380	95	ug/kg	
91-57-6	2-Methylnaphthalene	95 U	380	95	ug/kg	
85-01-8	Phenanthrene	190 U	380	190	ug/kg	
129-00-0	Pyrene	95 U	380	95	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	53%		49-124%
92-94-4	p-Terphenyl	57%		56-141%

0010

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB-DU02		
Lab Sample ID:	F30558-4	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	SW846 8310 SW846 3550B	**Percent Solids:**	89.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP004069.D	1	03/26/05	MRE	03/24/05	OP12790	GPP162
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	5.0 ml
Run #2		

Polynuclear Aromatic Hydrocarbons

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	180 U	730	180	ug/kg	
208-96-8	Acenaphthylene	180 U	730	180	ug/kg	
120-12-7	Anthracene	180 U	370	180	ug/kg	
56-55-3	Benzo(a)anthracene	92 U	370	92	ug/kg	
50-32-8	Benzo(a)pyrene	18 U	73	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	18 U	73	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	18 U	73	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	18 U	73	18	ug/kg	
218-01-9	Chrysene	92 U	370	92	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	18 U	73	18	ug/kg	
206-44-0	Fluoranthene	92 U	370	92	ug/kg	
86-73-7	Fluorene	180 U	370	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	18 U	73	18	ug/kg	
91-20-3	Naphthalene	92 U	370	92	ug/kg	
90-12-0	1-Methylnaphthalene	92 U	370	92	ug/kg	
91-57-6	2-Methylnaphthalene	92 U	370	92	ug/kg	
85-01-8	Phenanthrene	180 U	370	180	ug/kg	
129-00-0	Pyrene	92 U	370	92	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		49-124%
92-94-4	p-Terphenyl	92%		56-141%

0013

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB001-01		
Lab Sample ID:	F30558-2	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.1
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22607.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	13.5	9.3	6.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	102%		59-121%

0036

U = Not detected MDL - Method Detection Limit I = Result >= MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB002-01		
Lab Sample ID:	F30558-3	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	93.8
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22608.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	18.8	8.8	6.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		59-121%

0037

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB006-01		
Lab Sample ID:	F30558-1	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	86.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP48296.D	1	03/28/05	SM	03/24/05	OP12789	GOP1417
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	11.6	9.5	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		59-121%

0035

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CEF-B290A-SB-DU02		
Lab Sample ID:	F30558-4	**Date Sampled:**	03/22/05
Matrix:	SO - Soil	**Date Received:**	03/23/05
Method:	FLORIDA-PRO SW846 3550B	**Percent Solids:**	89.5
Project:	NAS Cecil Field-CTO-248		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ22609.D	1	03/26/05	SM	03/24/05	OP12789	GIJ1112
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C8-C40)	10.5	9.1	6.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	108%		59-121%

0038

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range

I = Result >= MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

TETRA TECH NUS, INC. F305558 CHAIN OF CUSTODY | NUMBER 290A-032105 | PAGE 1 OF 1

PROJECT NO:	FACILITY:	PROJECT MANAGER	PHONE NUMBER	LABORATORY NAME AND CONTACT:
N4242, CTO 248	NASCF, TANK 290A	PAUL CALLIGAN	813 806 0202	ACCUTEST H. WANDROY
SAMPLERS (SIGNATURE)		FIELD OPERATIONS LEADER	PHONE NUMBER	ADDRESS
Merwin W. Dale		MERV DALE	904 636 6125	4405 VINELAND Rd., C-15
		CARRIER/WAYBILL NUMBER		CITY, STATE
		Fedex 8427 1834 9649		ORLANDO, FL 32811

STANDARD TAT ☒
RUSH TAT ☐
☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 7 day ☐ 14 day

	DATE YEAR 2005	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAP (G) COMP (C)	No. OF CONTAINERS	PAHs SW8460 8310	TRPH FL-PRO							COMMENTS
CONTAINER TYPE PLASTIC (P) or GLASS (G)										G	G							
PRESERVATIVE USED										None	None							
1	03/22	1125	CEF-B290A-SB006-01	*	0	1	SO	G	4	2	2							Cool to 4°C
2	03/22	1140	CEF-B290A-SB001-01		0	1	SO	G	2	1	1							
3	03/22	1153	CEF-B290A-SB002-01		0	1	SO	G	2	1	1							WORK Release
4	03/22	0000	CEF-B290A-SB-D402		0	1	SO	G	2	1	1							1001712
																		* Use extra volume for Lab MS/MSD.

MWD

1. RELINQUISHED BY Merwin W. Dale	DATE 03/22/05	TIME 1600	1. RECEIVED BY Fedex	DATE 03/22/05	TIME —
2. RELINQUISHED BY FX	DATE 3/23/05	TIME 9:00	2. RECEIVED BY	DATE 3/23/05	TIME 9:00
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME
COMMENTS 0008					

DISTRIBUTION: WHITE (ACCOMPANIES SAMPLE) YELLOW (FIELD COPY) PINK (FILE COPY) 4/02R

HOLDTIME

SDG F30558

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCS	%	CEF-B290A-SB001-01	F30558-2	NM	3/22/2005	3/27/2005	3/27/2005	5	0	5
PCS	%	CEF-B290A-SB-DU02	F30558-4	NM	3/22/2005	3/27/2005	3/27/2005	5	0	5
PCS	%	CEF-B290A-SB006-01	F30558-1	NM	3/22/2005	3/27/2005	3/27/2005	5	0	5
PCS	%	CEF-B290A-SB002-01	F30558-3	NM	3/22/2005	3/27/2005	3/27/2005	5	0	5
PAH	%	CEF-B290A-SB002-01	F30558-3	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4
PAH	%	CEF-B290A-SB006-01	F30558-1	NM	3/22/2005	3/24/2005	3/25/2005	2	1	3
PAH	%	CEF-B290A-SB-DU02	F30558-4	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4
PAH	%	CEF-B290A-SB001-01	F30558-2	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4
PAH	UG/KG	CEF-B290A-SB001-01	F30558-2	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4
PAH	UG/KG	CEF-B290A-SB002-01	F30558-3	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4
PAH	UG/KG	CEF-B290A-SB-DU02	F30558-4	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4
PAH	UG/KG	CEF-B290A-SB006-01	F30558-1	NM	3/22/2005	3/24/2005	3/25/2005	2	1	3
TPH	MG/KG	CEF-B290A-SB-DU02	F30558-4	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4
TPH	MG/KG	CEF-B290A-SB001-01	F30558-2	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4
TPH	MG/KG	CEF-B290A-SB002-01	F30558-3	NM	3/22/2005	3/24/2005	3/26/2005	2	2	4

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TPH	MG/KG	CEF-B290A-SB006-01	F30558-1	NM	3/22/2005	3/24/2005	3/28/2005	2	4	6

FIELD DUPLICATE PRECISION

ANALYTE	CEF-B290A-SB-DU02	CEF-B290A-SB001-01	RPD
TPH	10.5	13.5	25.00